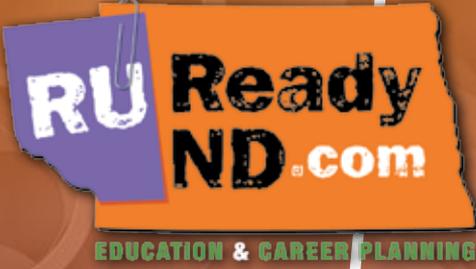


CAREER

North Dakota Career Resource Network **Outlook**



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The Career Outlook is a publication of the North Dakota Department of Career and Technical Education's Career Resource Network (CRN).

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and the Career Outlook is requested.

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North Dakota Army National Guard

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

Dear Students:

What does it mean to be "college and career ready?"

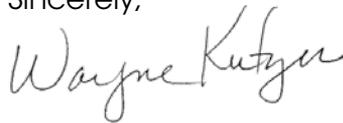
College readiness is dependent upon the ability to master content knowledge and apply basic skills in a variety of settings. Career readiness emphasizes necessary workplace skills such as clear communication, creativity, innovation, critical thinking, and teamwork. The development of technical, job-specific skills related to a career pathway prepares individuals for successful careers.

The goal of Career and Technical Education (CTE) is to prepare students for success in life, which includes both college and career readiness. CTE programs offer students the opportunity to explore careers through hands-on classroom activities and related work experiences. By enrolling in CTE courses, you will gain academic knowledge, and develop the skills necessary to be successful in your chosen career field.

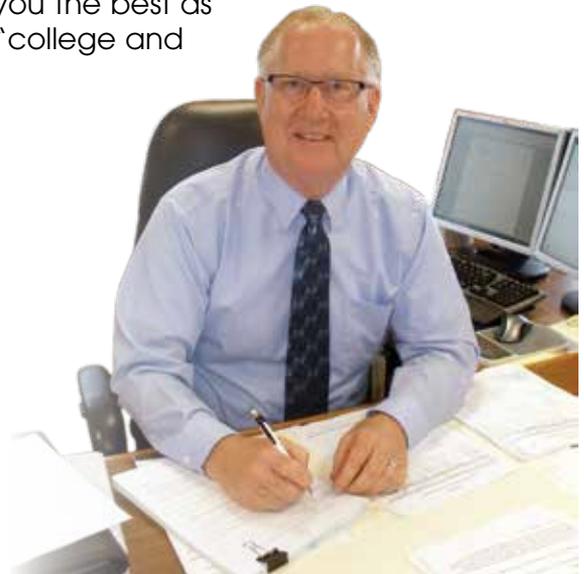
With so many career options to choose from, the decisions that need to be made may seem overwhelming. Planning for your career will help meet the needs of your community and North Dakota. The resources in this magazine will guide you in the process of setting goals for the future, as well as planning and preparing for a lifetime of success. I wish you the best as you prepare yourself to be "college and career ready."

Good luck!

Sincerely,



Wayne Kutzer, Director
ND Department of Career
and Technical Education



What's this?

It's a QR Code. You'll find these codes in several places throughout the Career Outlook. When you scan a QR Code using a mobile phone camera or webcam, the QR Code reader application takes you to a website or other web content.

Your phone or computer needs to have QR Code reader software. There are many websites where you can download free QR code reader applications. Do a web search using the keywords "QR reader" to find such applications.

Career Outlook User's Guide

Make the most of using the Career Outlook with your students or clients! Visit www.nd.gov/cte/crn/coug to find the Career Outlook User's Guide which contains a teacher's guide and lesson plans to enhance the use of the publication.

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College and Career Readiness

in North Dakota

Matt Becker, Andy Deichert, and Stephanie Sandstrom recently shared their experiences of growing up in North Dakota and the paths they took for college and their current occupations. Being involved in Career and Technical Student Organizations (CTSOs) during high school shaped their futures through career exploration, community involvement, and leadership development.

What's your story? Are you ready for college and career?

Andy grew up near Flasher and has returned to the community to farm and ranch with his brother. He also uses his technical training and skills to help the community and school district. The early experience of fixing things and wanting to be in the garage with his dad, older brothers and grandpa was a significant influence on his career choice.

When considering his Flasher High School years, Andy indicates that Math, Science and English classes have been beneficial. He uses what he learned every day whether calculating farming needs or communicating with his customers.

Family has played a major role in Andy's life. He lost his mother during senior year of high school and he realized that life cannot be taken for granted. He encourages students to live life to the fullest and work hard to achieve their dreams. "Don't be afraid to ask questions as there is always someone that is more than willing to help."

As a Family, Career and Community Leaders of America (FCCLA) state officer, Andy learned how to work in a group and be a leader when facing the everyday challenges. He credits FCCLA with helping him develop confidence and strengthening his networking with others. "In today's world, who you know and how you interact with people are keys to future success."

When asked about being part of North Dakota's future, Andy says "I would not trade North Dakota living for anything. From the rolling prairies to the badlands, the state is full of great people."

Andy Deichert

Farmer and Auto Technician

College: North Dakota State
College of Science (NDSCS),
Automotive Technology



The Social Media Director position was created at KKBold when Stephanie was hired. Much of her time is spent staying ahead of technology and teaching others about improvements and changes. Writing, research, creating social marketing strategies, consulting, troubleshooting, and evaluating technical reports are also part of her responsibilities.

Stephanie is a Minot High School graduate and credits Career and Technical Education (CTE) Marketing and Management classes for presenting her with real world experiences. As National President of Collegiate DECA, she learned that North Dakotans are perceived as friendly, smart, hard-working, and sensible people. She encourages students to “take advantage of the opportunities available in North Dakota.”

Influential people in Stephanie’s life include her parents, who are natural leaders and encouraged her to succeed. She would also like to publicly thank Kevin Reisenauer, Nicole Morrison-Mathern, Justin Fisk, Steve Owen, Chuck Kramer, and Tom Monahan. “Keep in touch with those who have made an impact in your life because they will be a great asset in the future.”

“I would not be who I am today without CTE classes. Students who go above and beyond their classroom experiences by getting involved in Career and Technical Student Organizations (CTSOs) are college and career ready. The reason is simple; no other coursework puts professional and personal development at its core!”

Stephanie shares that “I didn’t take the highest paying job right out of college, but I did take the job that could give me access to a world of projects and a lifetime of experiences. There is undeniable value in sweat equity, so put in the time!”



Stephanie Sandstrom
Social Media Director for KKBold



Future Business Leaders of America (FBLA) introduced Matt Becker to the world of business. He was encouraged to join and get involved in FBLA by Century H.S. teachers Diane Schlosser and Jessica DeVaal. He learned many important professional habits in FBLA and Collegiate DECA.

Matt attended the U.S. Senate Youth Program in Washington, D.C., and it is an experience that influenced his college and career choices in a big way. He considers it a privilege to work on Capitol Hill for North Dakota’s Congressman, which means the issues are familiar and important to him. Writing is a significant part of his job, and the skills he learned in AP English classes are still with him. He is grateful for teachers pushing him to succeed.

A Steve Miller Band concert at the North Dakota State Fair provided the starting point for an interest in concert photography. It has taken years of trial and error to consistently produce his best work with unpredictable stage lighting. He has been fortunate to photograph artists including the Rolling Stones, Van Halen, U2, Aerosmith, Hall & Oates, Journey and Boston. “Capturing a live rock concert is a thrilling experience like none other,” according to Matt.

“People are intrigued and want to know more when I tell them I grew up in North Dakota,” says Matt. The economic success of the state is a constant topic around the country. One of the valuable things about growing up here is the possibility to become connected as a young person. “It’s a lot easier to approach the Governor or CEO of a large business in North Dakota than it is in other states. Use this to your advantage.”

Matt Becker

Communications Director for
Congressman Kevin Cramer
College: University of Mary,
Business Administration



EDUCATION & CAREER PLANNING

Plan your strategy for college and careers with **RUReadyND.com!**

RUReadyND.com includes many useful features that help you:

- Discover your strengths and interests
- Create learning plans that match strengths and abilities to career choices
- Match interests, values and skills with education and employment opportunities
- Prepare for the ACT test with testGEAR™
- Look for programs and majors at North Dakota's colleges and universities
- Research financial aid and scholarship options
- Build resumes and practice for job interviews
- Track activities from middle school, high school, college and beyond



Get started today by checking us out at **RUReadyND.com!**

Like us on **Facebook**, join the conversation on **twitter** and learn new ways to prepare for your future on **Pinterest!**



For more information see your school counselor or visit www.nd.gov/cte/crn.



Reality Check

As you start planning your future life and career, consider what it will cost to live on your own. Use the figures below to estimate how much money you will need to earn each month or adjust them to better fit your lifestyle and expenses. Then, look through the Occupational Section (pages 19-52) to find careers that pay enough to meet your basic living expenses and the amount needed for taxes, retirement and insurance.*

Source: 2012 Expenditure Survey and statistics adjusted for 2014 on the Consumer Price Index.

What it costs to live on your own

Estimated basic monthly expenses for a 22-year-old living in the United States

Total: \$2,085 to \$2,535 monthly / \$25,020 to \$30,420 a year

Totals do not include saving for retirement or student loan payments

<p>Household Furnishings & Equipment: \$80-\$100</p> 	<p>Cell Phone: \$70-\$85</p> 	<p>Rent & Utilities: \$650-\$750 (studio & 1-bedroom apartments)</p> 	<p>Food: \$370-\$425 Groceries, take-out & restaurants</p> 	<p>Clothing & Footwear: \$100-\$150</p> 	<p>Laundry & Cleaning Supplies: \$30-\$40</p> 	<p>Health & Personal Care: \$90-\$110</p> 	<p>Gasoline: \$160-\$200</p> 	<p>Entertainment: \$130-\$155 Movies, concerts, cable tv, etc.</p> 	<p>Car Insurance & Maintenance: \$180-\$220</p> 	<p>Car Payment (Used): \$225-\$300</p> 
--	---	---	---	--	--	--	---	---	--	---

*Subtract 30 percent from the wages shown for each occupation to get an idea of the amount that will be on your paycheck, commonly referred to as "take home pay." This amount is an estimate of what is taken out to cover taxes, retirement, and insurance.

For more information on financial literacy, visit:
Jump\$tart Coalition for Personal Financial Literacy® • www.jumpstart.org/reality-check.html

youth FORWARD
NDYouthForward.com

PROMOTING
NORTH DAKOTA'S
OPPORTUNITIES

Youth Forward connects you to a future in North Dakota with information on jobs, education, entertainment and more opportunities for youth.

Visit **NDYouthForward.com** or connect with us on Facebook or Twitter and get access to:

- Job, internship and scholarship opportunities
- Podcast interviews with real people talking about working in their occupation
- News and events affecting North Dakota youth



/NDYouthForward



@NDYouthForward

MONEY FOR COLLEGE

FAFSA is the first step. FAFSA stands for Free Application for Federal Student Aid, and you complete it after your parents do their taxes.

- Research tuition, room and board expenses. They are different for each school so budget should be considered when making a decision on where you want to attend.
- Research and apply for scholarships. These aren't linked to the FAFSA (Free Application for Federal Student Aid) so you can start applying in the fall of your senior year.
- Complete the FAFSA as soon after January 1 as possible so you can take advantage of scholarship opportunities. For sure, complete the FAFSA by April 15. You'll find it at fafsa.gov.



4 WAYS TO PAY FOR COLLEGE

- 1. Scholarships**
Read the College Planning Center's tips on writing scholarships and resources to help you know where to apply.
- 2. Grants**
Grants are money that doesn't need to be repaid. You'll find out if you receive them after you complete the FAFSA.
- 3. Work-Study**
Ask the admissions department about working part-time in a work-study program.
- 4. Student loans**
Students and parents may borrow money to pay for school. Education loans come in four major categories: Federal Direct student loans, Federal PLUS loans, DEAL – the North Dakota state-sponsored student loan and other alternative (private) loans.



STUDENT LOANS ARE NOT FREE MONEY!

You start paying student loans with interest six months after you finish college. That may seem like a long time away now, but it will be here before you know it. Too many people find themselves regretting the amount of student loans they need to repay so read on and don't become one of them.

The average North Dakota student graduates with \$20,000 in student loans.* The average starting salary for a new college graduate in 2012 was \$44,455. We are going to assume that you just landed that job making \$44,455 per year. With deductions for taxes (Federal, State, FICA and Medicare), your monthly take home pay would be approximately \$2,923 or \$35,076 annually.**

2014 college graduate budget

Item	% of monthly take home income	Expense
Student loan payment (Assuming \$23,300 in loans at 4.66% interest)	8%	\$234
Housing (Rent, mortgage, condo maintenance fee, furniture, household items)	30%	\$878
Utilities (Phone, electricity, gas)	5%	\$146
Credit cards	5%	\$146
Food (Groceries, eating out)	10%	\$292
Transportation (Car payments, parking, insurance, gas, maintenance)	15%	\$439
Clothing	5%	\$146
Insurance (Home, life, medical, dental)	5%	\$146
Retirement investments (10% of gross monthly income each month)	10%	\$292
Other savings and investments	2%	\$58
Personal expenses (Entertainment, vacations, personal care, pet care, gifts)	5%	\$146
Total	100%	\$2,923

*Federal Reserve Bank of St. Louis <http://www.washingtonpost.com/blogs/govbeat/wp/2014/05/08/map-where-the-average-student-loan-burden-is-largest>

**National Association of Colleges and Employer

**http://www.collegeboard.com/prod_downloads/highered/yes/cc_tps/BudgetGrad05.pdf

CUT COLLEGE COSTS!

- Take dual credit courses in high school
- Research careers you may be interested in so you don't need to switch majors as often in college
- Community colleges are usually less expensive than universities so they may be a good option
- Living on campus is usually less expensive than living off-campus
- Consider the tuition, room and board expenses for each college when choosing the school you'd like to attend
- Start saving now if you haven't already
- Make money during the school year at a work-study job
- Apply for scholarships
- Control your recreation expenses – you may not be able to take a spring break trip!



banknd.nd.gov

Job Training and Career Placement – **FREE!**



Job Corps is the nation's oldest and most successful job training program for young adults ages 16 through 24. Students can enroll in Job Corps year-round. It is **FREE** to those who qualify. 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 an average of 200 student employees on an ongoing basis.

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. Check out our technical training options below, or find us on the web at quentinnburdick.jobcorps.gov.

Career and Technical Training

- Office Administration
- Culinary Arts/Food Service
- Health Occupations Training (CNA, LPN and now RN)
- Advanced Career Training at Minot State University
- Carpentry (UBCJA)
- Facilities Maintenance
- Maintenance Light Repair
- 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, including eligibility requirements, contact the Outreach and Admissions Office at Burdick Job Corps Center in Minot, ND at 701-857-9671 or 701-857-9611.



ADULT EDUCATION... *gives you a second chance!*

Adult Education provides free classes and programs that help adults over the age of 16 obtain basic academic and educational skills needed to be productive workers, family members, and citizens. Adult education provides a second opportunity to improve academic and life skills.

Each Adult Learning Center provides instruction for...

- reading, language/writing, math, computer literacy, keyboarding, science, and social studies;
- English as a Second Language (ESL) for New Americans and citizenship preparation;
- the GED exam; and,
- workplace and career readiness skills.

GED...get it now!

The US Census data estimates more than 75,000 individuals in North Dakota are without a high school diploma. Individuals who receive a GED will earn approximately \$10,000 more annually than those who do not. This in turn, improves an individual's economic status, spending patterns and tax contributions. North Dakota needs every able body in the workforce – a GED can provide you the skills to make a difference and launch a new career. Earn your GED now and reap the rewards.

Students can now take the GED by computer and receive instant results. Visit www.dpi.state.nd.us/adulted/index.shtm for more information.

See page 62 for Adult Learning Centers in your area.

REGISTERED APPRENTICESHIP

**Take a Bold Step
Towards Your Future!**

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.

76 active programs, over 1,100
apprentices registered, and more
than 50 different occupations in
North Dakota including:

- carpenters
- HVAC workers
- sheet metal workers
- lineworkers-line maintainers
- power plant operators
- telecommunication workers
- painters, and
- construction laborers

FOR MORE INFORMATION ABOUT REGISTERED APPRENTICESHIP:

Visit www.mynextmove.org/profile/ext/oa.
Search for apprenticeship and training
programs in North Dakota and nationwide
at <http://oa.doleta.gov/bat.cfm>.

Contact ND Office of Apprenticeship
701-250-4700 • www.ndapprenticeship.com

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

Apprentices complete a combination of industry-specific
classroom education and hands-on career training
leading to nationally recognized certifications. Most
programs are mainly in the fields of construction-based
occupations such as utility workers, lineworkers with
power generation and transmission, and power plant
operators. All are equal opportunity employers.

**Must be 16 or older to apply.*



REGISTERED
APPRENTICESHIP
Earn. Learn. Succeed.

North Dakota Academic & Career & Technical Education Scholarship Programs

Qualified students may be eligible for up to \$6,000 to
be used for undergraduate study after high school
graduation if they satisfy the criteria for one of these
scholarships.

These scholarships are to be used at North Dakota accredited
public or private institutions of higher education. For purposes
of eligibility, "full-time" means enrollment in at least 12 credits
during the student's first two semesters of college/university
attendance and enrollment in at least 15 credits during each
semester thereafter. The scholarships are renewable provided
the student maintains a 2.75 GPA while attending college.

North Dakota seniors must apply by **June 5** to establish
eligibility. Students who are awarded a scholarship may defer
acceptance of the scholarship. Recipients have up to six years
following high school graduation to utilize the scholarship
award. Students will need to plan their high school coursework
carefully to meet all eligibility requirements within the 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 701-328-2244.

All students must:

- Be North Dakota residents
- Graduate from a North Dakota
public or non-public high
school; a high school in a
bordering state under chapter
15.1-29; or a non-public high
school in a bordering state
while residing with a custodial
parent in North Dakota
- Meet the state diploma
and Academic or Career
and Technical Education
scholarship requirements
- Obtain a grade of at least "C"
(2.00 on 4.00 GPA scale) in
each diploma and scholarship
coursework requirement
- Have a final cumulative GPA of
at least a 3.00 on 4.00 scale
- Earn a 24 minimum composite
on the ACT or three 5's on
WorkKeys assessments (CTE
Scholarship only)



VOCATIONAL REHABILITATION

~ Make the Transition ~

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:

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

The Division of Vocational Rehabilitation (VR) can help you make an informed choice about your future career plans. To be eligible for VR services, you must:

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



If you are eligible, VR will help you to determine an appropriate employment goal. You and your counselor will work together to develop an Individual Plan for Employment (IPE), which identifies the services you need to achieve your goal. VR may be able to help you transition from high school to college by:

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

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

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

For more information about Vocational Rehabilitation and the services they offer visit

www.nd.gov/dhs/dvr



DVR DIVISION of
VOCATIONAL REHABILITATION
State of North Dakota

Refer to page 63 (resources page) for contact information and locations of the eight Vocational Rehabilitation regional offices.

JOB SERVICE North Dakota



CAREER

exploration

everything you ever wanted to know about North Dakota career opportunities

(well - nearly everything)

jobsnd.com
(type)



Products

(click)

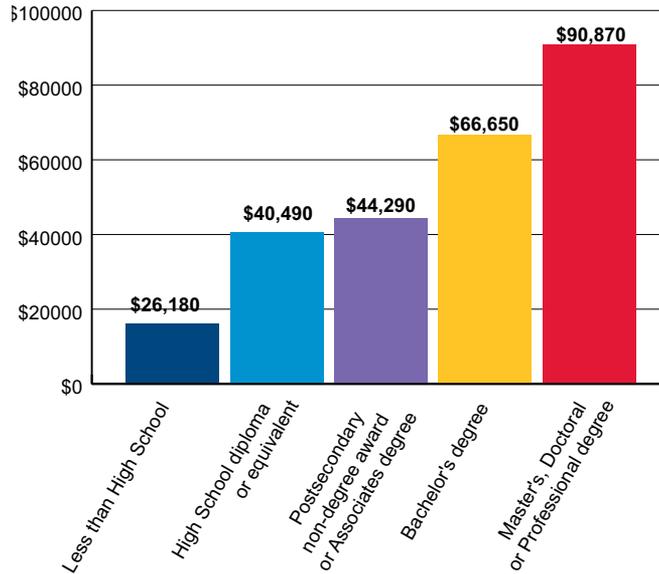
(scroll)



Job Service North Dakota is an equal opportunity employer/program provider. Auxiliary aids and services are available upon request to individuals with disabilities.

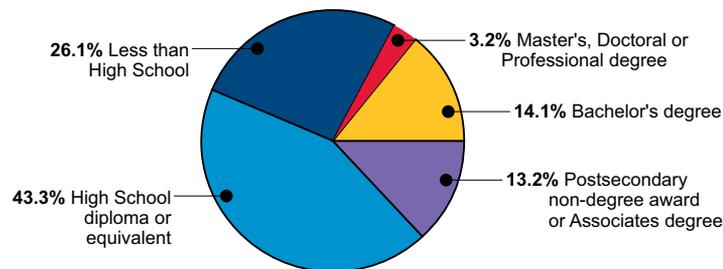
AVERAGE ANNUAL NORTH DAKOTA WAGES BY TYPICAL EDUCATION LEVEL

including 2013 average (mean) wages



BY TYPICAL EDUCATION LEVEL

including 2013 data



Careers in North Dakota is an online publication that covers nearly everything you ever wanted to know about career opportunities in North Dakota including employment projections, wages, core tasks, work activities, skills, knowledge, and typical education/ training requirements. Use this publication as a general career exploration guide, not as the sole determinant of a career direction or choice. This publication can be found online at jobsnd.com.



Career Clusters Interest Survey

Directions: Check the items in each box that best describes 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 at the end of the survey to see which 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 <input checked="" type="checkbox"/> 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	Total
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	<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	Total
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	<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	Total
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	Total
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	Total
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	Total
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	Total
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	Total

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.

Terminology: For definitions of terminology used in the survey, visit www.nd.gov/cte/crn/toolkit/docs/TermDefinitions.pdf.

	Activities that describe what I like to do:	Personal qualities that describe me:	School subjects that I like:	Total number checked
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	Total
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	Total
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"/> Logical/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	Total
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	Total
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	Total
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	Total
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	Total
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	Total

Indicate your top three Clusters of Interest based on the number of checks in the Survey:

1	Agriculture, Food & Natural Resources	P. 19	9	Hospitality & Tourism	P. 38
2	Architecture & Construction	P. 22	10	Human Services	P. 39
3	Arts, A/V Technology & Communications	P. 24	11	Information Technology	P. 41
4	Business Management & Administration	P. 26	12	Law, Public Safety, Corrections & Security	P. 43
5	Education & Training	P. 29	13	Manufacturing	P. 44
6	Finance	P. 32	14	Marketing	P. 46
7	Government & Public Administration	P. 33	15	Science, Technology, Engineering & Mathematics	P. 48
8	Health Science	P. 34	16	Transportation, Distribution & Logistics	P. 51

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

RUReadyND.com

How To Use THE OCCUPATIONAL SECTION

1 Occupational Title/Description

2 Related Occupations

3 Nat'l Employment
ND Employment/
Proj. Openings
ND Earnings

4 Holland Type

5 Rating

6 Hiring Practices

Agriculture

Postsecondary Programs – Associate Degree Or Less

<p>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.</p>	<p>Agricultural Scientists, Farm and Home Management Specialists</p>	<p>19,390 → 83/3 → \$28,800-\$37,230</p>	<p>Realistic HS</p>	<p>Many employers prefer applicants who have at least 2 years of specialized training or an associate's degree in applied science or science-related technology.</p>
<p>Bakers (M) Mix and bake ingredients according to recipes to produce breads, rolls, cookies, cakes, pies, pastries and other baked goods.</p>	<p>Caterers, Cooks or Chefs, Food Service Directors</p>	<p>165,270 → 428/14 → \$18,680-\$30,000</p>	<p>Realistic HS</p>	<p>Training ranges from on-the-job to career and technical education program completion. Hired by wholesale and retail bakers, grocery stores, government, and other institutions.</p>

1 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.

E : Energy Occupations in North Dakota

2 Related Occupations - A listing of occupations that are similar in work performed on the job.

3 Nat'l Employment, ND Employment, Projected Openings, 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);
Faster than average ↗ (2-3.5% per year);
Stable → (0-1.9% per year); and
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.**

4 Holland Type

Artistic (Creator): 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 (Organizer): 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 (Persuader): 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 (Thinker): 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 (Do-er): 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 (Helper): Social occupations frequently involve working with, communicating with, and teaching people. These occupations often involve helping or providing service to others.

* For more information about Holland Types, visit www.nd.gov/cte/crn/docs/HollandTypes.pdf.

5 Rating

HW: High Wage - North Dakota average annual salary of at least \$45,000.

HS: High Skill - Occupation requires at least one year of post high school education or training.

☀: Bright Outlook - Occupation has a very high number of annual openings and/or is a fast growing occupation in North Dakota.

6 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.

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 RURReadyND.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. 19	7. Government & Public Administration	P. 33	13. Manufacturing	P. 44
2. Architecture & Construction	P. 22	8. Health Science	P. 34	14. Marketing	P. 46
3. Arts, A/V Technology & Comm.	P. 24	9. Hospitality & Tourism	P. 38	15. Science, Technology, Engineering & Mathematics	P. 48
4. Business Management & Administration	P. 26	10. Human Services	P. 39	16. Transportation, Distribution & Logistics	P. 51
5. Education & Training	P. 29	11. Information Technology	P. 41		
6. Finance	P. 32	12. Law, Public Safety, Corrections & Security	P. 43		

The occupation information in this section is taken from the 2012-2022 North Dakota Employment Projections, 2014 Edition. This publication is a long-term look at future employment levels by industry and occupation updated every two years by Job Service North Dakota, working closely with the Bureau of Labor Statistics. Wages were updated using the 2013 Edition of the North Dakota Employment and Wages by Occupation, which is updated annually by Job Service North Dakota. When current figures are not included in these publications, every effort is made to obtain current and relevant data from those fields.

NORTH DAKOTA

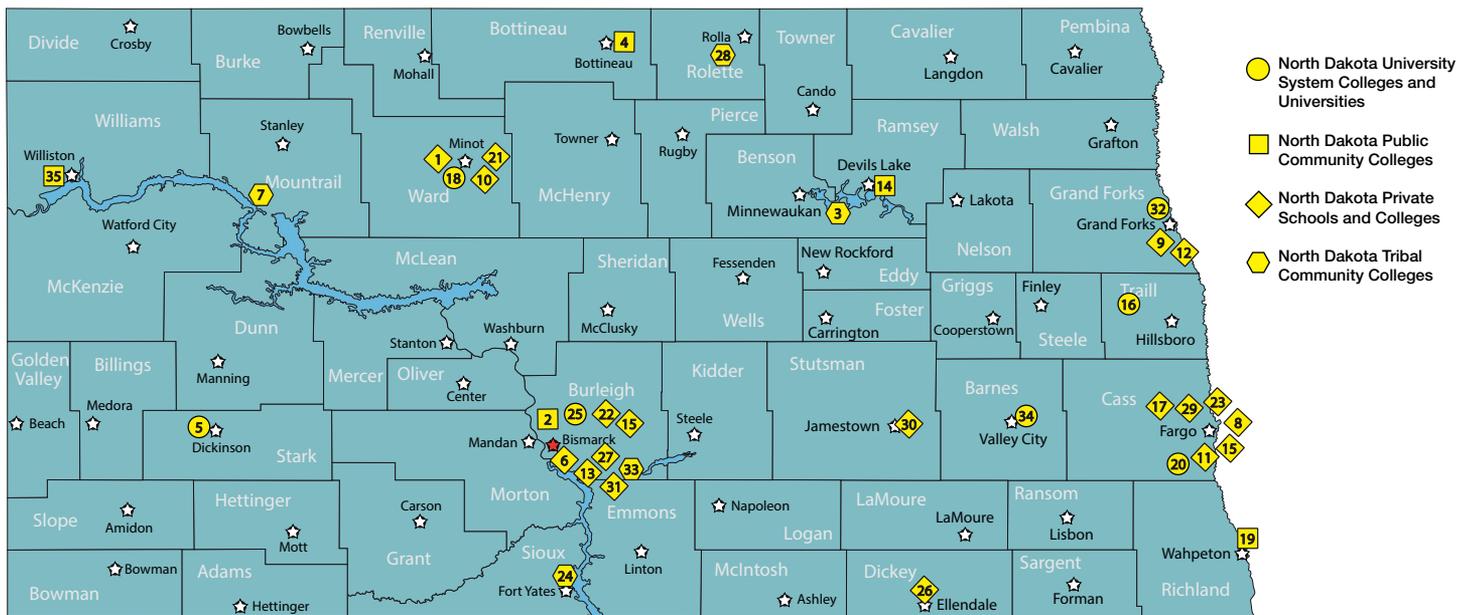
Postsecondary Education/Training Programs

The postsecondary education/training program tables are designed to help match a program with your career goal. You can then identify the campus(es) offering those programs. These tables follow the occupational tables for the various clusters (on pages 19-52).

AA and AS programs are general transfer programs to BS and BA programs. An "A" in the program tables (on pages 19-52) indicates that the institution has a recommended AA or AS course of study for students planning on transferring to a bachelors 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
- 1-2 one to two years
- 2 two years
- 4 four years
- 4+ more than 4 years
- G graduate school
- 4G four years or a graduate program
- C upper-level certificate program
- A AA/AS programs are general transfer programs
- M Military
- * may be offered through distance education



1	BJCC	Burdick Job Corps Center
2	BSC	Bismarck State College
3	CCCC	Cankdeska Cikana Community College
4	DCB	Dakota College at Bottineau
5	DSU	Dickinson State University
6	EATC	Executive Air Taxi Corporation
7	FBCC	Fort Berthold Community College
8	FFS	Fargo Flight School
9	GFKFS	GFK Flight Support
10	HAHD	Headquarters Academy of Hair Design
11	JS HDF	Josef's School of Hair Design Fargo
12	JS HDGF	Josef's School of Hair Design Grand Forks
13	JZT	JZ Trend Academy
14	LRSC	Lake Region State College
15	LWT	Lynnes Welding Training
	MIL	Military
16	MaSU	Mayville State University
17	MBC	Moler Barber College

18	MiSU	Minot State University
19	NDSCS	North Dakota State College of Science
20	NDSU	North Dakota State University
21	PAR	Pietsch Aircraft and Restoration
22	RCB	Rasmussen College Bismarck
23	RCF	Rasmussen College Fargo
24	SBC	Sitting Bull College
25	S-NDSU	Sanford Nursing - NDSU
26	TBC	Trinity Bible College
27	THA	The Hair Academy
28	TMCC	Turtle Mountain Community College
29	TSPA	The Salon Professional Academy
30	UJ	University of Jamestown
31	UM	University of Mary
32	UND	University of North Dakota
33	UTTC	United Tribes Technical College
34	VCSU	Valley City State University
35	WSC	Williston State College

Occupational Section Index

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Advertising Sales Agents.....	46	Dietitians and Nutritionists (M).....	35	Insurance Adjusters.....	32	Radiologic Technologists (M).....	35
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Aircraft Mechanics (M).....	51	Drafters.....	22	Landscaping and Groundskeeping Workers.....	19	Reporters (M).....	24
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Civil Engineering Technicians.....	44	Firefighters (M).....	43	Occupational Therapy Assistants (M).....	35	Surveying and Mapping Technicians (M).....	48
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College and University Administrators.....	29	Gaming Dealers.....	38	Pharmacy Technicians (M).....	35	Teachers, Secondary.....	29
Computer and Information Systems Managers (M).....	41	General Managers.....	26	Photographers (M).....	24	Teachers, Special Education.....	29
Computer Operators (M).....	41	Grain Elevator Operators.....	19	Physical Therapists (M).....	36	Team Assemblers.....	44
Computer Programmers (M).....	41	Graphic Designers (M).....	24	Physical Therapy Aides and Assistants (M).....	35	Telecommunications Line Installers and Repairers (M).....	24
Computer Support Specialists (M).....	41	Hairstylists and Cosmetologists.....	39	Physician Assistants (M).....	36	Tool and Die Makers.....	44
Computer Systems Analysts (M)....	41	Health Services Administrators.....	35	Physicians (M).....	36	Training and Development Specialists.....	27
Computer/ATM/Office Machine Repairers (M).....	41	Healthcare Social Workers.....	39	Plumbers and Pipefitters (M).....	23	Transportation Managers (M).....	52
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Construction Equipment Operators (Operating Engineers) (M).....	22	Heavy Equipment Mechanics (M).....	51	Police Patrol Officers (M).....	43	Truck Drivers (M).....	52
Construction Laborers.....	22	Home Health Aides.....	34	Postal Mail Carriers.....	51	Veterinarians (M).....	36
Construction Managers (M).....	22	Hosts and Hostesses.....	38	Postmasters (M).....	51	Veterinary Technicians and Technologists.....	35
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Cost Estimators (M).....	23	Hotel/Motel Managers (M).....	38	Prepress Technicians and Workers (M).....	24	Water Treatment Plant Operators (M).....	20
Counselors, Rehabilitation.....	39	Human Resources Managers (M) ..	27	Printing Press Operators (M).....	24	Welders and Cutters (M).....	44
Customer Service Representatives.....	26	Industrial Machinery Mechanics and Maintenance Workers.....	44	Process Plant (Chemical Plant) Operator.....	44	Writers and Editors (M).....	24
Database Administrators (M).....	41			Property Managers.....	26	Zoologists and Wildlife Biologists.....	20
Dental Assistants (M).....	34			Psychologists (M).....	39		
Dental Hygienists (M).....	34			Public Relations and Fundraising Managers (M).....	27		
Dental Laboratory Technicians (M).....	34						
Dentists (M).....	35						
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*M-stands for Military

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/ Proj. Openings 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 Specialists	19,390 → 83/3 → \$28,800-\$37,230	Realistic HS	Many employers prefer applicants who have at least 2 years of specialized training or an associate's degree in applied science or science-related technology.
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	165,270 → 428/14 → \$18,680-\$30,000	Realistic HS	Training ranges from on-the-job to career and technical education program completion. Hired by wholesale and retail bakers, grocery stores, government, and other institutions.
Butchers and Meat Cutters Cut, trim or prepare consumer-sized portions of meat for use or sale in retail establishments.	Bakers, Cooks, Kitchen Supervisors	138,900 → 467/17 → \$20,010-\$32,520	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, Farm Products 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	11,290 → 159/5 → \$42,850-\$73,560	Enterprising HS HW	Training ranges from a high school diploma to a bachelor's degree. Experience working with livestock and knowledge of various breeds necessary. Good communication skills essential.
E Derrick Operators, Oil and Gas Rig derrick piping and drilling equipment as it is brought up from or lowered down into the drill hole.	Oil Well Drillers, Service Unit Operators, Roustabouts	22,400 ↗ 2,085/84 ↘ \$40,350-\$64,470	Realistic HS HW	Requires knowledge of oilfield operations, pumps and circulating systems. Prior experience and safety training is often required. Must be able to lift up to 100 pounds and work long hours in all weather conditions.
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 Managers	930,600 ↘ 26,338/464 → \$33,840-\$119,530	Realistic HS HW ☀️	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 market. Repair farm buildings and fences.	Groundskeepers, Park Rangers, Wildlife Technicians, Farmers	261,720 → 3,342/101 → \$18,730-\$32,780	Realistic	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	29,740 ↘ 164/6 → \$42,640-\$67,510	Realistic HS HW	Most employers require career and technical education training. Must like working outdoors. Hired by the federal, state, or local government.
Grain Elevator Operators Load, unload, store, clean, and blend grains for milling and shipment. Observe conveyor and machinery operations to detect malfunctions.	Conveyer Operators, Stock & Material Movers	40,760 → 533/25 → \$26,690-\$38,130	Realistic HS	Mechanical aptitude and familiarity with agricultural equipment are preferred. Must have ability to work at heights and in confined spaces. Must be able to lift 50 pounds or more. May be required to work a flexible schedule.
Landscaping and Groundskeeping Workers Landscape 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	839,780 ↗ 2,520/100 → \$18,820-\$29,710	Realistic ☀️	Training is available on the job or through a career and technical education program. Knowledge of horticulture is helpful. Must like working outdoors and be able to do physical labor.
E Nuclear Power Operators (M) Service and calibrate radiation protection instruments and equipment, monitor plant performance, measures and records plant chemistry and radioactivity levels, and operates chemical and radiochemical instrumentation and equipment.	Maintenance Technicians, Chemistry Technicians and Health Physics Technicians	7,790 → NA/NA \$56,910-\$101,950	Realistic HS HW	Preference is given to those who have completed formal apprenticeship or career and technical education 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.
E Oil Well Drillers (Rotary Drill Operators) Set up and operate drills to remove underground oil and gas, or remove core samples for testing during oil and gas exploration.	Derrick Operators, Earth Drillers, Service Unit Operators	27,130 ↗ 1,243/50 ↘ \$42,020-\$76,560	Realistic HS HW	Usually requires 2-3 years' industry experience and appropriate certifications. Must be able to work long hours in all weather conditions.
E Petroleum Pump System Operators Operate power pumps and auxiliary equipment to produce flow of oil or gas from wells in oil field.	Service Unit Operators, Wellhead Pumpers, Pile Driver Operators	41,390 ↘ 344/41 ↑ \$41,800-\$71,050	Realistic HS HW ☀️	Usually requires prior oilfield experience. First aid/CPR training is helpful.
E Power Plant Operators Control, operate or maintain machinery to generate electrical power.	Boiler Operators, Stationary Engineers, Water Treatment Plant Operators	39,810 ↘ 335/10 ↘ \$61,590-\$81,610	Realistic HS HW	Preference is given to those who have completed formal apprenticeship or career and technical education training. Good mechanical aptitude and mathematics skills are necessary. Hired by generating plants.

AGRICULTURE, FOOD & NATURAL RESOURCES

Occupational Title/Description	Related Occupations	Nat'l Employment ND Employment/ Proj. Openings ND Earnings	Holland Type Rating	Hiring Practices
E Roustabouts Assemble and repair oilfield machinery and equipment. Dig holes, set forms, pour cement to make derrick foundations. Dismantle and assemble boilers. Use hand tools and power tools.	Derrick Operators, Rotary Drillers	68,230 ↗ 4,257/113 ↘ \$30,040-\$51,410	Realistic HW	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.
E Service Unit Operators, Oil, Gas, and Mining Operate equipment to increase oil flow from producing wells or to remove stuck pipe, casing, tools, or other obstructions from drilling wells.	Excavating and Loading Machine Operators, Rotary Drill Operators	59,260 ↑ 3,587/145 ↘ \$38,000-\$64,780	Realistic HS HW	Requires previous oil industry experience, excellent customer service skills, and mechanical aptitude. A 2-year technical degree is often preferred.
E System Operators (Power Distributors and Dispatchers) Control the flow of power on the grid, and ensure safe and reliable power is delivered to customers.	Transmission Operator, Transmission System Operator, Generation Coordinator	11,260 ↘ NA/NA \$84,320-\$98,810	Realistic HS HW	Preference is given to those who have completed formal apprenticeship or career and technical education 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.
E 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	110,230 → 414/19 → \$28,490-\$52,010	Realistic 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

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	13,740 ↘ 163/8 → \$26,590-\$39,190	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.
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.	Biochemists, Life Scientists, Foresters, Plant Physiologist, Environmental Scientist	13,160 → 211/8 → \$34,950-\$66,700	Investigative HS HW	Education requirements range from a bachelor's degree to a doctoral, 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.
Zoologists and Wildlife Biologists 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	18,530 → 65/2 → \$48,730-\$68,250	Investigative HS HW	A bachelor's degree or a graduate degree is required. May sell, inspect, conduct research, or teach. Nationally over one-half are hired by the government. A doctorate is generally required for college teaching and independent research.

	BICC	BSC	CCCC	DOB	DSU	EATC	FBCC	FFS	GKFS	HAHD	JSHDF	JSHDGF	JZT	LRSC	LWT	MaSU	MBC	MIL	MISU	NDSCS	NDSU	PAR	RCB	RCF	SBC	S-ND SU	TBC	THA	TMCC	TSPA	UJ	UM	UND	UTTC	VCSU	WSC		
AGRICULTURE, FOOD & NATURAL RESOURCES																																						
Agribusiness & Applied Economics																																						4G
Agricultural Business & Management		2A			2,4		2A							1-2																							4	
Agricultural Production/Farm & Ranch Management		2			1-2		1							1-2							2																A	
Agricultural Science, General				A	4									A																							4	
Agricultural Systems Management																					A																A	
Agriculture Sales & Service/Ag Industry & Technology		2			2*		1-2																															
Animal & Range Sciences					4																2	4G															A	
Animal Health Management																																					C	
Bioinformatics & Computational Biology																				4																		
Biology, Fisheries & Wildlife																					A	4												4		4	A	
Cereal Science																																					G	
Communications, Health/Agriculture/Management																																					4	
Crop & Weed Sciences					4																A	4															A	
Culinary Arts		1																			2																	
Earth System & Policy																																				4,G		
Energy Management			4*																																			
Engineering, Environmental																																				G*		
Entomology																																					G	
Environmental & Conservation Science							2,4																														A	
Environmental Geoscience																																				4		

AGRICULTURE, FOOD & NATURAL RESOURCES

	BUCC	BSC	CCCC	DCB	DSU	EATC	FBCC	FFS	GFKFS	HAHD	JSHDF	JSHDGF	JZT	LRSC	LWT	MaSU	MBC	MIL	MISU	NDSCS	NDSU	PAR	RCB	RCF	SBC	S-NDISU	TBC	THA	TMCC	TSPA	UJ	UM	UND	UTTC	VCSU	WSC	
AGRICULTURE, FOOD & NATURAL RESOURCES																																					
Environmental Technology/Lab & Field Tech				2																																	
Environmental Technology/Science				2	4																																
Environmental Technology/Water Management				2																																	
Equine Science					2,4																C,4																
Flowershop Technology				1																																	
Food & Nutrition/Community Nutrition																					G											4			A		
Food Safety																					4G,C																
Food Science																					4															A	
Geographic Information System			1-2																																		
Geology																			4		4												4G				
Golf Course Grounds Technology				1																																	
Horticulture																		M			4G																
Floral Design & Greenhouse Technology				1-2*																																	
Landscape Design/Technology				1-2*														M																			
Turf Management																																					
International Agribusiness					4																G																
Natural Resources Management			2	2	4													M			4G																A
Plant Pathology																					4G																
Plant Science/Plant Protection																					G																A
Power Plant Technology			1-2																																		
Precision Agriculture													2																								
Process Plant Technology			1-2																																		
Range Science					4																4G																
Soil Science					4																4G																
Studies in Community & Environment																			4														4				
Sustainable Vegetable Production				1-2*																																	
Therapeutic Riding																						C															
Urban Forestry Technology				1-2*																																	
Veterinary Technology																					4																A
Water & Wastewater Technology			1-2																																		
Water Quality Technology				1														M																			
Wildlife & Fisheries Technology/Science				2														M																		4	
Zoology																					4G																

NOTES

FAST FACT

By total numbers, there are more farmers in North Dakota than any other single occupation.

PROGRAM LENGTH IS INDICATED BY:

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

SYMBOLS:

- : Energy Occupations in North Dakota
- : Bright Outlook

See pages 16-17 for more information on the contents of these charts.

ARCHITECTURE & CONSTRUCTION



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

Occupational Title/Description	Related Occupations	Nat'l Employment ND Employment/ Proj. Openings ND Earnings	Holland Type Rating	Hiring Practices
Postsecondary Programs – Associate Degree Or Less				
Brickmasons 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, Tilesetters	58,730 ↑ 221/10 ↗ \$38,920- \$66,950	Realistic HS HW ☀️	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	580,570 ↑ 4,158/134 → \$27,560-\$41,740	Realistic HS ☀️	Preference may be given to applicants who have completed career and technical education 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.
E Construction Equipment Operators (Operating Engineers) (M) Operate construction equipment, such as graders, bulldozers, scrapers, pumps, derricks and front-end loaders.	Mining Machine Operators, Truck Drivers	340,950 ↗ 3,075/91 → \$38,370- \$53,580	Realistic HW ☀️	Trained on the job or through career and technical education programs. Should have average mechanical ability. Must be willing to work outdoors and work irregular hours.
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	824,970 ↑ 5,291/205 → \$27,560-\$41,740	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 (M) 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	213,720 ↗ 1,089/29 → \$52,910- \$85,200	Enterprising HS HW ☀️	A bachelor's degree in construction management can greatly enhance one's opportunities in this occupation. Certification, though not required, is increasingly important. Experience in construction trades is also important.
Drafters 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	181,640 → 596/18 → \$34,210- \$51,443	Realistic HS HW	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.
Drywall Installers Apply plasterboard or other wallboard sheets to ceiling and interior walls. Fill the joints between drywall sheets with plaster and prepare the walls for painting. Work from ladders, scaffolds, or stilts.	Carpenters, Insulation Workers, Floor Covering Installers	79,950 ↗ 350/8 → \$28,930- \$40,610	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.
E Electric Utility Workers (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, System Protection Technician, Substation Operator, Metering Technician	111,350 → 1,013/51 → \$45,380-\$71,760	Realistic HS HW ☀️	Preference is given to those who have completed formal apprenticeship or career and technical education 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.
E 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	542,680 ↗ 2,864/118 ↗ \$36,010- \$62,500	Realistic HS HW ☀️	Many employers prefer a graduate of a career and technical education 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.
E 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	44,780 ↗ 680/18 → \$36,370- \$56,100	Realistic HW ☀️	Trained on the job or through career and technical education 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	251,700 ↑ 730/35 ↗ \$33,700-\$49,990	Realistic HS HW ☀️	Employers prefer applicants with career and technical education training or apprenticeship program completion. Mechanical ability and the ability to make decisions accurately are important. Hired by contractors. May be self-employed.

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/ Proj. Openings 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	27,800 → 78/1 ↓ \$20,690-\$34,570	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 Technicians 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	95,980 → 303/19 → \$18,450-\$30,590	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's 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	54,830 → 240/3 → \$19,440-\$35,840	Artistic HS	Training ranges from a high school diploma to a bachelor's degree. Technical understanding of photography necessary. Hired by commercial art studios, newspapers, magazines, or may be self-employed.
Prepress Technicians and Workers(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	38,000 ↓ 95/2 ↓ \$17,620-\$33,390	Realistic HS	Employers prefer postsecondary career and technical education 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	166,620 ↓ 415/7 ↓ \$22,540-\$38,610	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. Read news bulletins and make other announcements. Broadcast weather, traffic conditions, and other information.	Sportscasters, Narrators, Disc Jockey	30,530 ↓ 327/7 ↓ \$17,950-\$36,570	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	120,050 → 355/11 → \$38,800-\$60,220	Realistic HS HW	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	194,360 → 749/26 → \$24,830-\$37,620	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	136,510 → 422/15 → \$36,270-\$54,790	Conventional HS HW	A master's degree from an ALA-accredited program is required. Must be able to present ideas and information clearly and communicate with people. Computer literacy important.
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	202,530 ↗ 457/11 → \$36,160-\$59,430	Enterprising HS HW ☀️	A bachelor's 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.
Reporters (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	48,460 ↓ 241/8 ↓ \$25,950-\$41,420	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.
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	189,680 → 535/14 ↗ \$27,180-\$57,963	Artistic HS HW	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.

ARTS, A/V TECHNOLOGY & COMMUNICATIONS

	BICC	BSC	CCCC	DCB	DSU	EATC	FBCC	FFS	GKFS	HAHD	JSHDF	JSHDGF	JZT	LRSC	LWT	MaSU	MBC	MIL	MSU	NDSCS	NDSU	PAR	RCB	RCF	SBC	S-NDSU	TBC	THA	TMCC	TSFA	UJ	UM	UND	UTTC	VCSU	WSC
ARTS, A/V TECHNOLOGY & COMMUNICATIONS																																				
ART																																				
Art			2	A	4											A			4	4										4			2	4	A	
Art Entrepreneurship					4														4											4						
Art, Graphic Design & Communications		1-2																																		
Arts, Visual																														4		4G				
Interior Design																				4																
Music					4														4	A	4G				4				4	4	4G		4*	A		
Music Composition																																4				
Musical Theatre																																4				
Photography				1A																																
Professional Sewing																						C														
Theater Arts					4														4	4G										4	4G				A	
COMMUNICATION																																				
Broadcasting																			4	4																
Communications, Cross-Cultural																														4						
Communications, General/Mass		2			4											4			4	6									4	4	4G		4	A		
Communications, Health/Agriculture/Management																				4																
Communications, Media																														4						
Communications, Organizational																														4	4					
Journalism																				4										4						
Public History																				4																
Public Relations & Advertising																				4																
Web Development																			C*																	
Writing & Editing					4																													C		
AUDIO/VIDEO TECHNOLOGY																																				
Digital Audio Production		2,C																																		
Graphic Design Technology/New Art Media			2																	4	2,4*	2,4*										4				
Information Processing		1-2											1-2																							
Library & Information Technologies																1*																			G*	
Public Relations & Advertising																				4																
Webmaster/Web Designer		1-2	1-2																	1-2	4	1-2,2*	1-2,2*													2

NOTES

FAST FACT

There are 115 projected openings in North Dakota for the jobs shown for this cluster in the next decade.

PROGRAM LENGTH IS INDICATED BY:

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

SYMBOLS:

- : Energy Occupations in North Dakota
- : Bright Outlook

See pages 16-17 for more information on the contents of these charts.

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/ Proj. Openings ND Earnings	Holland Type Rating	Hiring Practices
Postsecondary Programs – Associate Degree Or Less				
Administrative Services 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, Facility Managers	269,500 → 671/23 → \$45,300-\$96,340	Enterprising HS HW ☀️	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.
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	2,832,010 → 10,749/301 → \$17,760-\$28,530	Conventional ☀️	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	677,450 → 1,437/54 → \$22,810-\$35,760	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	2,389,580 → 4,799/201 → \$23,710-\$35,590	Conventional ☀️	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	755,210 ↘ 2,903/38 → \$31,010-\$49,270	Conventional HW	Employers may require career and technical education 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.
General Managers Plan, direct, or coordinate the operations of public or private sector organizations. Duties and responsibilities include formulating policies, managing daily operations, and planning the use of materials and human resources.	Administrative Services Managers, Purchasing Managers	1,973,700 → 6,428/224 → \$59,100-\$124,370	Enterprising HS HW ☀️	Must have good interpersonal and customer service skills and knowledge of the company. Can require up to 10 years' experience. Sometimes requires a Bachelor's degree related to that industry. Not an entry-level position.
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	220,680 ↘ 441/5 → \$28,360-\$40,190	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	512,970 ↑ 559/24 ↗ \$25,230-\$32,870	Conventional HS ☀️	Employers require career and technical education 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	1,366,510 → 3,020/116 → \$31,890-\$58,160	Enterprising HS HW ☀️	A bachelor's degree is preferred by some employers and others require some career and technical education training. Experience and familiarity with the organization activities are necessary.
Property 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	165,960 → 515/20 → \$32,760-\$68,400	Enterprising HS HW ☀️	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.
Receptionists 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	973,580 ↗ 3,006/117 → \$19,880-\$30,880	Conventional ☀️	Employers may prefer career and technical education 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	2,159,000 → 4,527/126 → \$25,580-\$38,950	Conventional ☀️	Training ranges from high school career and technical education that teaches 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 (M) 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	1,168,330 → 3,801/185 → \$37,360-\$65,800	Conventional HS HW ☀️	A bachelor's degree is required and a higher degree and/or experience is often preferred. Good communication skills are essential as well as computer skills. Many accountants pass an exam to become certified public accountants (CPA's).

BUSINESS MANAGEMENT & ADMINISTRATION

Occupational Title/Description	Related Occupations	Nat'l Employment ND Employment/ Proj. Openings ND Earnings	Holland Type Rating	Hiring Practices
Human Resources Managers (M) Manage programs, set company policy on the employment, pay, and training of workers. May direct employee relations, benefits, and staff development.	Compensation Director, Labor Relations Director, Personnel Manager, Industrial Psychologists	156,560 → 238/11 → \$60,970-\$106,347	Enterprising HS HW	College graduate in business or public administration usually required. Some prefer a master's degree. Good communication skills, ability to analyze information and work independently necessary. Ability to function under pressure important.
Management Analysts (M) Conduct organizational studies and evaluations, design systems and procedures, conduct work simplifications and measurement studies and prepare operations/procedures manuals.	Human Resource Manager; Accountants	567,840 ↗ 675/24 → \$43,740-\$74,460	Conventional HS HW ☀️	Nationally, employment among management analysts is expected to grow faster than the average for all occupations. Demand for the services of these workers will grow as organizations continue to seek ways to improve efficiency and control costs.
Public Relations and Fundraising Managers (M) Plan and direct public relations programs to create and maintain favorable public image or solicit and maintain funds for client, employer or organization.	Marketing Managers; Sales Managers	53,730 → 114/4 → \$52,820-\$107,210	Enterprising HS HW	College graduates with related experience, high level of creativity and strong communication skills needed. Keen competition for jobs expected.
Training and Development Specialists Develop and conduct training and development for employees.	Human Resource Manager; Teacher	224,110 ↗ 569/20 ↗ \$33,120-\$60,500	Social HS HW ☀️	Candidates need a combination of education and related work experience to become a training and development manager. Although managers need a bachelor's degree for most positions, some jobs require a master's degree.

	BICC	BSC	CCCC	DCB	DSU	EATC	FBCC	FFS	GKFS	HAHD	JSHDF	JSHDGF	IJT	LRSC	LWT	MaSU	MBC	MIL	MISU	NDSCS	NDSU	PAR	RCB	RCF	SBC	S-NDSU	TBC	THA	TMCC	TSPA	UJ	UM	UND	UTTC	VCSU	WSC	
BUSINESS MANAGEMENT AND ADMINISTRATION																																					
MANAGEMENT AND BUSINESS ADMINISTRATION																																					
Administrative Assistant	1	1-2	2	2*	2		1							1-2				M										2					2		1-2*		
Legal		1-2																M																			
Medical	1	1-2		2*														M																			
Accountancy				2																	4+											6	4G				
Accounting				A	4*									2		A			4	4			1-2, 1,2,4*	1-2, 1,2,4*						4	4	4G				2A	
Accounting & Computing		4*,A		2*																																	
Administrative Assistant/Health Information Management				2																							2									1-2*	
Advertising & Marketing				1-2																									4							A	
Application Software Specialist																			C*																		
Applied Management																			4*																		
Art Entrepreneurship					4														4																		
Bookkeeping	1			1*																																	
Business Administration & Management		4*,A		2A	4*									2A		4			4G*	2A	4G		1,1-2, 2*	1,1-2, 2*	2-4	2				4	4G	G	2,4	4			
Business Administration/Biblical Studies																										2,4											
Business & Management, General/Applied	2	2	1	4*	2										2			M	4G*	1-2			4*	4*				4	2-4	4						A, 1-2	
Business & Management, Tribal Management						2												M															2				
Business Integration Management																																				4*	
Computerized Office Management				2																																	
Construction Management																					4																
Customer Relationship Management																																					C
Digital Enterprise																																					
Energy Management/Economics & Finance		4*																	4																		
Entrepreneurship		C*																		1			1-2,2*	1-2,2*	1			1			4	C,4					
Hotel/Restaurant/Hospitality/Tourism Management																				2	4										4					A	
Human Resources																							1-2, 2,4*	1-2, 2,4*							4						
Human Resources Development/Management					C*,4*													M											4	G	4						

BUSINESS MANAGEMENT & ADMINISTRATION

	BICC	BSC	CCCC	DCB	DSU	EATC	FBCC	FFS	GKFS	HAHD	JSHDF	JSHDGF	JZT	LRSC	LWT	MaSU	MBC	MIL	MISU	NDSCS	NDSU	PAR	RCB	RCF	SBC	S-ND SU	TBC	THA	TMCC	TS PA	UJ	UM	UND	UTTC	VCSU	WSC	
BUSINESS MANAGEMENT AND ADMINISTRATION																																					
Information Processing		1-2*												1-2																				2		A	
International Business					4*														4*												4						
Internet Marketing																							1-2, 2,4*	1-2, 2,4*													
Investments																				4																	
Knowledge Management																			GC*																		
Leadership Studies																					1-2																
Management																			4G*	4											4	4					
Management Information Systems/ Information Tech						1-2								1-2					4*	A	4	4*	4*							4	4	4			2,A		
Managerial Finance & Accounting																					4									4		4					
Marketing																			4*											4	4G				2		
Marketing & Sales																						1-2,2*	1-2,2*														
Marketing Management				2,A										A						2	C												4				
Medical Secretary	1		2*		1-2													M																			
Merchandising																						C,G															
Nonprofit Leadership																																		C			
Office Supervision & Management					2									2																		4		4	A		
Policy Analysis																																	C				
Reception Services	1		1*																																		
Small Business Management			2*																															2			
Sports Management																4													2		4	4					
Statistics																						C,4G															
GOVERNMENT & PUBLIC																																					
Caregiver Services				1-2*																																	
Community Management/Development																						G															
Eligibility Worker		C																																			
Human Services		2																					1, 1-2,2*	1, 1-2,2*	2												
Nonprofit Leadership																																		C			
Public Health																																					
Public Administration						2												M				GC												C,4G		A	
Social Entrepreneurship																																	C				

NOTES

FAST FACT

There are 16,380 projected openings in North Dakota for all Business occupations in the next decade.

PROGRAM LENGTH IS INDICATED BY:

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

SYMBOLS:

- ☀ : Energy Occupations in North Dakota
- ☀ : Bright Outlook

See pages 16-17 for more information on the contents of these charts.

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/ Proj. Openings 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	187,180 ↗ 483/13 → \$19,070-\$31,450	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 professional has ultimate responsibility for the design and implementation of educational programs and services.	Child Care Attendants, Home Health Aides, Librarian Attendants	1,190,720 → 4,027/131 → \$23,680-\$32,980	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.
Teachers, Preschool, 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	352,730 ↗ 576/22 → \$18,850-\$30,590	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.
Postsecondary Programs – Bachelors Degree or More				
College and University Administrators Plan, direct, or coordinate research at colleges and universities, including community colleges. Teach courses and serve on university committees.	Faculty Members, Colleges and Universities	126,340 ↗ 298/12 → \$59,410-\$130,400	Enterprising HS HW	Must have at least a master's degree. Most positions require a doctorate. Good oral and written communication skills and an inquiring, analytical mind are essential. Hiring process is extremely competitive.
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	1,240,400 ↗ 4,497/120 → \$45,511-\$85,334	Investigative HS HW	Must have at least a master's degree. Some universities require a doctoral degree. Must have an 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 family and consumer sciences activities. Includes county agricultural agents, home economists, and extension service advisors.	Adult and Career and Technical Education Teachers, Plant Physiologists	9,120 → 57/2 → \$31,290-\$60,030	Social HS HW	Minimum requirement is a bachelor's degree in agriculture or family and consumer sciences. Must be able to work with people. Hired by federal or state government and extension service.
School and Vocational Counselors Counsel individuals and provide group educational and career guidance services.	Clinical Psychologists, School Social Workers, Employment Counselors	241,870 → 692/23 → \$39,160-\$60,130	Social HS HW ☀️	Must have a master's 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.
School Principals and Superintendents Plan, direct, and coordinate the educational activities of colleges, universities, preschool, elementary and secondary schools. Work with financial budgets. Review programs to insure conformance to standards.	Vocational Educ. Director, Corrections Education Supervisor, Dean of Students	226,760 → 524/19 → \$59,890-\$92,550	Social HS HW ☀️	Master's or doctoral degree required for many positions, especially at the college level. Teaching experience, leadership, organizational and communication skills important. Not an entry level position.
Teachers, Career and Technical Education Secondary School Teach or instruct technical subjects at the secondary school level.	Secondary Teachers, Vocational Counselors, Software Trainer	18,150 → 544/20 → \$37,490-\$53,320	Social HS HW ☀️	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 career and technical education 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	1,344,240 → 5,073/201 → \$35,100-\$52,300	Social HS HW ☀️	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	946,730 → 2,674/101 → \$35,990-\$52,280	Social HS HW ☀️	Minimum of a bachelor's 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	428,610 → 1,103/29 → \$39,910-\$56,080	Social HS HW	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.

EDUCATION & TRAINING

	B/CC	BSC	CCCC	DCB	DSU	EATC	FBCC	FFS	GFKFS	HAHD	JSHDF	JSHDGF	JZT	LRSC	LWT	MaSU	MBC	MIL	MSU	NDSCS	NDSU	PAR	RCB	RCF	SBC	S-NDSU	TBC	THA	TMCC	TSPA	UJ	UM	UND	UTTC	VCSU	WSC	
EDUCATION & TRAINING																																					
Library & Information Technologies																1																				G*	
Linguistics																																				G	
Mathematics for Middle School Teachers																																4					
Middle School Science & Engineering for Teachers																																				C*	
Paraeducation					1-2*																																
Physical Education, Exercise Science & Wellness				A															4	A											4	4	4		A		
Physics for Teachers																				G															C		
School Psychology																				G																	
Science, Technology, Engineering, Mathematics (STEM)																					G																
Social Science				A	4*											4		4		4G												4	4		4		
Speech, Debate & Forensics																				4G																	
Speech-Language Pathology																				G																	
Speech-Language Pathology Assistant														2																						2*	
STEM Education																																				G*	
Studies, Gender/Women's																					4																
Studies, Indian			2																			4												4			
Studies, International																					4													4			
Teacher Education																								2						4							
Teaching & Learning																																				G	
Teaching English Language Learners																																			G	G*	
Transfer/Pre-Professional/University Parallel	2A			2	2									2							2															2	
SPECIAL EDUCATION																																					
Autistic Spectrum Disorder																																				C	
Communication Disorders/Sciences & Disorders																				4G															4	A	
Early Childhood/Special Education			2	A									1-2	2,4					G,C	A											4	4	4G	2	A		
Education, Deaf																				G,C																	
Education, Mental Retardation																								4													
Human Services: Intellectual & Developmental Disabilities																					2,4*																
Special Education															4*					4G																	
Special Education/Early Childhood																				G,C											4	4					
Special Education/Emotional																				G,C														4			
Special Education/Learning Disabilities																				G,C													4				
Special Education/Strategist																				G,C																	
Specific Learning Disabilities																				G,C																	
EDUCATION ADMINISTRATION																																					
Administration/Leadership, Educational																																		4G	G		

NOTES

FAST FACT

There are nearly 40,000 people working in education in North Dakota today.

PROGRAM LENGTH IS INDICATED BY:

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

SYMBOLS:

- : Energy Occupations in North Dakota
- : Bright Outlook

See pages 16-17 for more information on the contents of these charts.

FINANCE



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

Occupational Title/Description	Related Occupations	Nat'l Employment ND Employment/ Proj. Openings ND Earnings	Holland Type Rating	Hiring Practices
Postsecondary Programs – Associate Degree Or Less				
Bank Tellers (M) 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	527,680 → 2,092/117 → \$20,960-\$27,610	Conventional ☀️	Chances of employment may be enhanced through career and technical education training and on-the-job training.
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	368,850 ↗ 899/39 → \$22,080-\$36,010	Conventional ☀️	A career and technical education 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	1,586,389 → 9,281/221 → \$25,240-\$39,980	Conventional ☀️	Some employers require formal career and technical education training. Knowledge of business arithmetic and bookkeeping are necessary. Employers may train their personnel on the job.
Insurance Adjusters 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	275,500 → 533/18 → \$29,070-\$54,450	Conventional HS HW ☀️	A bachelor's 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.
Insurance Sales Agents Sell life, casualty, health, automotive or other types of insurance.	Real Estate Agents, Securities Sales Workers, Financial Advisors	354,460 ↗ 1,850/65 → \$25,090-\$68,220	Enterprising HS HW ☀️	Some employers prefer applicants with formal training and experience; however, others will train on the job. Must display sales and leadership. License required.
Postsecondary Programs – Bachelors Degree or More				
Financial Managers (M) 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	499,320 → 1,190/42 → \$62,100-\$118,090	Enterprising HS HW ☀️	College graduate in business or economics usually required. Some prefer a master's degree. Good communications skills, ability to analyze information, and work independently is necessary. Not an entry level position.
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	301,860 → 1,040/35 → \$38,760-\$71,490	Enterprising HS HW ☀️	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	325,140 → 466/17 → \$31,040-\$93,160	Enterprising HS HW ☀️	A college degree is increasing in importance. The ability to motivate people and work independently is essential. Must pass an examination for state license.

	BJCC	BSC	CCCC	DCB	DSU	EATC	FBCC	FFS	GKFS	HAHD	JSHDF	JSHDGF	JZT	LRSC	LWT	MaSU	MBC	MIL	MISU	NDSCS	NDSU	PAR	RCB	RCF	SBC	S-NDSU	TBC	THA	TMCC	TSPA	UJ	UM	UND	UTTC	VCSU	WSC	
FINANCE																																					
Accountancy				2																																4	
Accounting			2	A	4*									2		A			4		4		4*	4*							4	4	4G			2A	
Accounting & Computing		4*,A		2*			1-2							2				M																			
Banking & Finance																			4		C										4	4	4				
Bookkeeping	1			1*																																	
Business Economics/Economics/ Applied Economics				A																																4-G	
Economics/Applied Economic																						4												4G		A	
Family Financial Planning																						C								4							
Finance					4*														4		C											4				A	
Investments																						4															
Managerial Finance & Accounting																															4		4				

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/ Proj. Openings ND Earnings	Holland Type Rating	Hiring Practices
Postsecondary Programs – Associate Degree Or Less				
Eligibility Interviewers, Government Programs Determine eligibility of persons applying to receive assistance from government programs and agency resources, such as welfare, unemployment benefits, social security, and public housing.	Loan Interviewers and Clerks; Municipal Clerks; Tax Collectors	123,920 → 440/15 → \$33,720-\$44,190	Social HS ☀️	Requires good customer service and organizational skills. Openings for the North Dakota state government require a Bachelor's degree and three years' experience.
Postsecondary Programs – Bachelors Degree or More				
Inspectors and Compliance Officers except Construction and Agriculture (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.	Ag. Commodities Inspectors, Occupational Health and Safety Inspector Transportation Inspector	471,750 → 1,122/33 → \$38,330-\$67,070	Conventional HS HW ☀️	Many require a college degree in addition to experience and successful scores on an examination. Master's degree is becoming necessary to compete for jobs. Hired by federal, state and local government. Not an entry level position.
Social and Community Service Managers (M) 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	115,330 ↑ 538/18 → \$45,360-\$65,180	Social HS HW ☀️	Bachelor's degree generally required. Work may involve directing social workers, counselors or probation officers.

Note: Postsecondary programs in the Government and Public Administration cluster can be found in the clusters that share the same or similar occupations in the private sector.

NOTES

FAST FACT

There are over 32,000 federal, state, and local government employees in North Dakota today.

PROGRAM LENGTH IS INDICATED BY:

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

SYMBOLS:

- 🇺🇸 : Energy Occupations in North Dakota
- ☀️ : Bright Outlook

See pages 16-17 for more information on the contents of these charts.

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/ Proj. Openings 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	51,010 ↑ 72/4 ↗ \$26,540-\$54,680	Investigative HS HW	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	309,540 ↑ 635/23 → \$32,220-\$43,760	Social ☀️	Preference is given to graduates of career and technical education 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	192,330 ↑ 676/34 ↗ \$51,290-\$68,090	Social HS HW ☀️	Must be a graduate of an approved training program. License required. Hired by dental offices, public health offices, hospitals or clinics.
Dental Laboratory Technicians (M) Construct and repair full or partial dentures or dental appliances.	Orthotics and Prosthetics Technicians, Opticians	36,790 → 239/12 → \$23,910-\$42,080	Realistic HS ☀️	Employers may prefer an employee with career and technical education 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.
Dietetic Technicians Assist dieticians in the providing of food service and nutritional programs.	Dieticians, Family & Consumer Sciences Specialist, Food Service Managers	26,420 ↗ 95/3 ↗ \$20,490-\$27,790	Social	Most employers seek applicants who have completed career and technical education training. Candidate should have supervisory potential and ability to work with people. Hired by hospitals, nursing homes, colleges, public health services, and clinics.
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	68,390 ↑ 366/17 → \$20,980-\$31,760	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	237,660 ↑ 747/37 → \$16,770-\$30,810	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.
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	806,710 ↗ 1,972/93 ↗ \$23,320-\$31,190	Social ☀️	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	79,040 ↑ 323/5 ↘ \$27,080-\$61,040	Social HS HW	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	157,080 ↑ 396/21 ↗ \$32,710-\$44,210	Investigative HS ☀️	Most have an associate's 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	571,390 ↑ 419/18 ↗ \$25,520-\$34,700	Social ☀️	Employers prefer career and technical education 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	180,760 ↑ 726/35 ↗ \$23,820-\$36,040	Conventional HS ☀️	Work in hospitals, clinics, nursing homes, or other related institutions. Employers prefer graduates of a two-year associate's degree or vocational program.
Medical Transcriptionists 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	68,350 → 446/11 → \$25,620-\$35,910	Conventional HS	Employers require career and technical education 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.

HEALTH SCIENCE

Occupational Title/Description	Related Occupations	Nat'l Employment ND Employment/ Proj. Openings ND Earnings	Holland Type Rating	Hiring Practices
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	705,200 ↑ 3,342/150 → \$32,460-\$42,160	Social 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, or disabled patients. May specialize in areas as profusionist, nurse anesthetist and other areas.	Occupational Therapists, Physical Therapists, Physician Assistants	2,661,890 ↑ 7,731/314 → \$45,960-\$61,060	Social HS HW ☀️	Nursing degree can be obtained in 2 or 4 years of college. Must pass examination given by State Board of Nursing in order to be licensed.
Nursing Assistants (Aides and Orderlies) 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	1,427,830 ↑ 6,721/245 → \$23,470-\$30,370	Social 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.
Occupational Therapy Assistants (M) Assist occupational therapists in providing occupational therapy treatments and procedures.	Physical Therapist Assistants, Occupational Therapists	30,450 ↑ 120/7 ↗️ \$35,210-\$48,960	Social HS HW ☀️	An associate's 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	195,670 ↗️ 729/20 → \$53,220-\$75,210	Conventional HS ☀️	2-year degree in pharmacy technology or equivalent training is required. License required. Must have excellent attention to detail and ability to prioritize.
Physical Therapy Aides and Assistants (M) Assist physical therapists in providing physical therapy treatments and procedures.	Occupational Therapy assistants, Physical Therapists	121,270 → 272/14 ↗️ \$27,555-\$44,165	Social HS ☀️	An associate's 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	194,000 ↑ 544/20 ↗️ \$36,120-\$51,750	Realistic HS HW ☀️	Successful completion of 2 to 4 years of formal training is necessary. Ability to deal with people essential. Hired by hospitals, clinics, and dental offices. Certification required.
Respiratory Therapists Following a doctor's order, administers treatment to patients suffering from asthma, emphysema, stroke, etc. Use special equipment such as ventilators and breathing machines to restore and aid in breathing. Help patients in performing breathing exercises.	Dialysis Technicians, Licensed Practical Nurses	118,640 ↗️ 336/14 ↗️ \$42,240-\$53,630	Investigative HS HW ☀️	Training ranges from an associate's to a master's degree. Shift work is common. Must be able to deal with people while under stress. Must be licensed in North Dakota.
Surgical Technologists (M) Assist in operations, under supervision of surgeons, registered nurses or other surgical personnel.	Licensed Practical Nurses, Medical Assistants, Certified Nurses Aides	97,930 ↑ 330/14 ↗️ \$31,970-\$44,800	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.
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.	Registered Nurses, Surgical Technicians, Medical Technologists, Medical Assistants	87,870 ↑ 189/8 ↗️ \$24,230-\$34,140	Realistic HS ☀️	Certified veterinary technicians must graduate from a 2 or 4-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.
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	28,850 ↗️ 293/7 → \$42,060-\$93,730	Investigative HS HW ☀️	Most students enroll in 2 to 4-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	112,300 ↗️ 179/6 → \$123,980-\$251,450	Investigative HS ☀️	A 4-year program after completion of a bachelor's 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, Family & Consumer Sciences Specialist, Food Service Managers, Dietetics Assistant	59,530 ↑ 220/8 → \$38,500-\$57,350	Investigative HS HW ☀️	A bachelor's degree with a major in food and nutrition is required plus an internship. Master's degree requirements are becoming more common. May work early morning or late night hours. Work at medical facilities, schools.
Health Services Administrators 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	300,100 ↗️ 755/35 ↗️ \$53,270-\$91,140	Enterprising HS HW ☀️	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	162,630 → 552/21 → \$38,590-\$56,780	Investigative HS HW ☀️	A bachelor's degree is the minimum requirement. Accuracy, dependability and the ability to work under pressure necessary. May supervise work of medical laboratory technicians. Certification required.

HEALTH SCIENCE

	BICC	BSC	CCCC	DCB	DSU	EATC	FBCC	FFS	GFKFS	HAHD	JSHDF	JSHDGF	JZT	LRSC	LWT	MaSU	MBC	MIL	MISU	NDSOS	NDSU	PAR	ROB	RCF	SBC	S-ND SU	TBC	THA	TMCC	TSPA	UJ	UM	UND	UTTC	VCSU	WSC		
HEALTH SCIENCE																																						
Couple & Family Therapy																					4G																	
Cosmetology										1-2																												
Cytotechnology																			M																4			
Dental Assisting																					1,2																A	
Dental Hygiene																					2																A	
Developmental Sciences																						6																
Dietetics																						4G													4		A	
EMT – Paramedic Technology	1	1-2*																																				
Exercise Science/Leisure Studies/Sports Management					4												4																4	4		4		
Fitness & Wellness																	4*																4					
Fitness Trainer & Technician														1-2																								
Food & Nutrition/Community Nutrition																						G													4		A	
Gerontology				A																		4CG													4G	4		
Health Administration																								1-2,2*								4	G	C				
Health Information/Technician/Management	1-2			1-2														M		2*			1,1-2,2,4*	1,1-2,2,4*													2	
Health Information Technology																																				2		
Health Science				A																																4	A	
Histotechnician																																				C		
Kinesiology																																				4G		
Managerial Psychology																																			G			
Massage Therapy										1	1																					1					1-2*	
Medical Assistant		2*	1-2	2*														M																				
Medical Coding	1			1*																	1*																1*	
Medical Lab Science																			4		4													4G	4	A		
Medical Laboratory Technician		2A																																				
Medical Secretary	1																																					
Medical Transcription				1*																																	2	
Medicine (Physicians)																																		4	G		A	
Mental Health Care Associate																																					1*	
Nurse Assistant	1	1	2				1							1																								
Nurse Practitioner/Specialist																																		G	C,G			
Nursing Administration																																			G			
Nursing, Practical	1			1	2		1-2							2							2													G	2	1*		
Nursing, Registered	2	2A		2	4		2							A		4*			4	1	4G					4					4	4G	4G		4G	2*A		
Nutrition																																			G			
Nutrition & Foodservice																																				2		
Occupational Safety & Environmental Health					4														M																4			
Occupational Therapy																			M															4	G	G	A	
Occupational Therapy Assistant																			M		2																	
Paramedic (EMT) Technology					1-2*																	1-2*																
Pharmaceutical Sciences																																		4			A	
Pharmacy Doctorate																																						
Pharmacy Technician																																						
Phlebotomy Technician		1																	M		1-2																	
Physical Therapy																			M																			
Physician Assistant Studies																																	4G	G	4G		A	
Psychology, Clinical																																		4		G	A	
Psychology, Counseling																																		4		G		
Psychology/Applied Psychology/Experimental Public Health					4												4		4*	A	4G										4	4	4G		4G	4		
Radiologic Technology/Sciences																			M	4													4	4			A	
Recreation Management, Sports & Recreational Studies					1-2*																												4		4			
Respiratory Care																																			4G			
School Psychology																					G																	
Speech-Language Hearing Sciences																						1-2																
Speech-Language Pathology																					4G														G		2*	
Speech-Language Pathology Assistant														2																								
Surgical Technology		2																																				
Veterinary Technology																							4															

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/ Proj. Openings ND Earnings	Holland Type Rating	Hiring Practices
Postsecondary Programs – Associate Degree Or Less				
Barbers (M) 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	15,100 → 112/3 → \$17,370-\$44,190	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.
Childcare Aides/Workers Attend to children at schools, businesses, private households and child care institutions.	Teachers Aides, Home Care Aides	597,900 ↗ 3,921/164 → \$17,370-\$44,190	Social ☀️	Employers may prefer career and technical education training. Must have the desire and ability to work with small children.
Hairstylists and Cosmetologists 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	351,960 → 1,939/62 → \$19,210-\$36,590	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.
Personal and Home Care Aides Assist professionals from a 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 services and help clients obtain them.	Occupational therapist assistants; Physical therapist assistants; Nurse Assistant	1,135,470 ↑ 2,711/123 ↗ \$23,490-\$30,480	Social ☀️	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 Service Technician (Human Services Worker) Assist professionals from a 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 help clients obtain them.	Child, Family, and School Social Workers; Personal and Home Care Aides	355,500 ↗ 859/38 → \$22,000-\$34,370	Social ☀️	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	45,020 → 1,060/22 → \$28,130-\$53,230	Social HS HW	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	103,840 ↗ 167/7 → \$36,120-\$49,370	Social HS HW ☀️	Generally a master's 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.
Healthcare Social Workers Provide persons, families or vulnerable populations with psychosocial support needed to cope with chronic, acute or terminal illnesses.	Social Workers; Clergy	141,830 ↑ 446/17 → \$36,210-\$48,010	Social HS ☀️	A bachelor's degree in social work 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) 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	104,480 → 268/9 → \$36,430-\$74,570	Investigative HS HW	Doctoral 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	276,620 ↗ 486/17 → \$37,600-\$52,420	Social HS HW ☀️	Employers require a bachelor's 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.

NOTES

HUMAN SERVICES

	BJCC	BSC	CCCC	DCB	DSU	EATC	FBCC	FFS	GFKFS	HAHD	JSHDF	JSHDGF	JZT	LRSC	LWT	MaSU	MBC	MIL	MISU	NDSOS	NDSU	PAR	RCB	RCF	SBC	S-NDU	TBC	THA	TMCC	TSFA	UJ	UM	UND	UTTC	VCSU	WSC
HUMAN SERVICES																																				
Addiction Studies							2											M	4*													4				A
Anthropology																					G															
Barbering																	1																			
Behavioral Statistics																					4															
Community Management/Development																					G															
Conflict Transformation																																		C		
Cosmetology										1-2	1	1	2														1		1-2							
Couple & Family Therapy																					4G															
Eligibility Worker		C																																		
Esthetician/Skin Care											1	1																		1						
Forensic Psychology																																		G		
Gerontology																					C															
Human Services		2					2																1,1-2,2*	1,1-2,2*												4
Intercultural Studies																										4										
Mental Health Care Associate																		M																		1-2*
Nail Technology/Manicurist												1	1																							
Philosophy & Religion																						4					2-4*			4	4	4				A
Policy Analysis																																		C		
Psychology, Clinical																																	4		G	A
Psychology, Counseling																										4						4		G	A	
Psychology/Applied Psych/Experimental					4											4			4*	A	4G									4	4	4G		4		
Rehabilitation & Human Services																																		4		
School Psychology																				G																
Social Welfare																						1-2														
Social Work		4*,A																	4*	A												4	4G		A	
Sociology				A															4		0												4G		A	

NOTES

FAST FACT

There are 462 projected openings in North Dakota for the jobs shown for this cluster in the next decade.

PROGRAM LENGTH IS INDICATED BY:

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

SYMBOLS:

-  : Energy Occupations in North Dakota
-  : Bright Outlook

See pages 16-17 for more information on the contents of these charts.

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/ Proj. Openings ND Earnings	Holland Type Rating	Hiring Practices
Postsecondary Programs – Associate Degree Or Less				
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	67,450 ↘ 253\2 ↘ \$22,810-\$41,270	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 Specialists (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.	Computer and Network Support Specialists, LAN Technicians, Data Recovery Specialists, Computer Repairers	541,250 ↗ 1,200/46 → \$33,370-\$51,320	Investigative HS ☀	Preference is given to persons who have career and technical education training or have a bachelor's degree in computer related science. Must be capable of exacting analytical work.
Computer/ATM/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	110,850 → 563/16 → \$26,550-\$47,060	Realistic HS	Requires career and technical education training in electronics. Must have good vision, normal hearing, and color perception. Hired by computer manufacturers and retail stores.
Postsecondary Programs – Bachelors Degree or More				
Computer and Information Systems Managers (M) Plan, direct or coordinate activities in electronic data processing, information systems, systems analysis and computer programming.	Computer Systems Analysts; Computer Programmers	319,080 ↗ 586/19 → \$70,470-\$112,000	Enterprising HS HW ☀	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	312,340 → 457/14 → \$39,040-\$61,250	Investigative HS HW	Many employers require applicants to have a bachelor's or higher degree and relevant experience; however, certain entry level jobs may require a career and technical education associate's 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	507,100 ↑ 813/26 → \$49,720-\$89,220	Investigative HS HW ☀	Preference is given to individuals with a bachelor's degree. Some employers require a master's degree. 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	114,910 ↗ 189/8 → \$44,330-\$79,080	Investigative HS HW ☀	Many employers seek applicants who have a bachelor's degree in computer science or computer information systems. Certain entry level jobs may require an associate's or career and technical education degree in computer science. Must be capable of exacting analytical work.
Information Security Analysts (M) Plan, implement, upgrade, or monitor security measures for the protection of computer networks. May ensure appropriate security controls are in place that will safeguard vital electronic infrastructure. May respond to computer security breaches.	Computer Security Specialist, Network Security Analyst, Internet Security Specialist	78,020 ↑ 243/15 ↑ \$39,860-\$70,330	Investigative HS HW ☀	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.
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 and websites. May administer network security measures.	Computer Systems Analysts; Computer Network Support Specialists, Network Coordinator	362,310 ↗ 551/17 → \$48,070-\$73,130	Conventional HS HW ☀	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.
Software Developers (M) Develop, create and modify computer applications software. Analyze user needs and develop software solutions. Design software for client use and may analyze and design databases within an application area.	Engineers (Industrial, Agricultural, Mechanical), Computer Engineering Tech, Computer Hardware Designer	1,329,680 ↗ 1,806/70 ↗ \$44,500-\$73,155	Investigative HS HW ☀	Employers may prefer applicants with a graduate degree. Must have creative, analytical minds and capacity for detail. Communication essential. Hired by research laboratories, industrial plants, and government.

INFORMATION TECHNOLOGY

	BICC	BSC	COCOC	DCB	DSU	EATC	FBCC	FFS	GFKFS	HAHD	JSHDF	JSHDGF	JZT	LRSC	LWT	MaSU	MBC	MIL	MISU	NDSCS	NDSU	PAR	RCB	RCF	SBC	S-NDSU	TBC	THA	TMCC	TSPA	UJ	UM	UND	UTTC	VCSU	WSC	
INFORMATION TECHNOLOGY																																					
Application Software Specialist																			C*																		
Computer Information Systems				2A			2									4															4	4			4		
Computer Information Technology			2																			1,1-2, 2*	1,1-2, 2*							4				2			
Computer Science Specialist																																					
Computer Science/Programming		4*A			4*														C,4	2A	4G	4*	4*							4		4G			A		
Computer Support Specialist		2*																		1-2							1-2										
Computer Systems Tech																				1																	
Computer Technology Management					4*																																
Computerized Office Management				2																																	
Customer Relationship Management																																				C	
Database Administration																						1-2, 2*	1-2, 2*														
Database Technology				2																																	
Engineering, Computer																					4G																
Enterprise Applications																				1															C*		
Graphic Design Technology/New Art Media																			4	4		1-2, 2,4*	1-2, 2,4*										4				
Information Assurance/Network Security				2																1		1-2,2*	1-2, 2*														
Information Processing Technician				2			2																														
Information Systems																			G*	1-2										4							
Information Technology				2									2		C				4*	1					1-2					4	4				2		
Knowledge Management																			G,C*																		
Management Information Systems/ Information Tech													1-2						4*	A	4	2*	2*							4	4	4			A		
Multimedia Technologies/Web Design																						1-2, 2*	1-2, 2*														
Network Engineering				2																		1-2, 2*	1-2, 2*														
New Media & Web Design																					4																
Office Technology																																					
Operating System Tech				1-2																					1-2												
Petroleum Engineering Technology		1-2*																																			
Petroleum Production Technology		1-2*																																			2
Software Engineering																						C,G	1,2,4*	1,2,4*												4	
Web Development																				C*																	
Webmaster/Web Designer/ Development & Design		1-2*		1-2									2							1-2	4	1-2, 2*	1-2, 2*													2	

NOTES

FAST FACT
 The Information Technology industry in North Dakota is projected to add 1,565 jobs in the next decade.

PROGRAM LENGTH IS INDICATED BY:

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

SYMBOLS:

- 🇺🇸 : Energy Occupations in North Dakota
- ☀️ : Bright Outlook

See pages 16-17 for more information on the contents of these charts.

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/ Proj. Openings 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	432,680 → 850/30 → \$28,790-\$40,650	Realistic ☀️	Employers may prefer persons with one or two years of postsecondary school in law enforcement.
Dispatchers, Emergency Services (M) Operate radio, telephone, or computer equipment at emergency response centers. Receive reports from the public of crimes, disturbances, fires, and medical or police emergencies. Relay information to law enforcement and emergency response personnel. May maintain contact with caller until responders arrive.	Dispatchers, Truck and Taxi (Radio); Medical Records Technicians; Customer Service Representatives	96,860 → 183/7 → \$27,490-\$40,680	Conventional	Must have good record keeping skills, good verbal communication and customer service skills, and perform well under pressure. Some employers prefer high school graduates. Knowledge of medical terminology is often required. Course work in communications and transportation may increase job opportunities.
Firefighters (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	302,870 → 544/20 → \$32,020-\$45,790	Realistic HS HW ☀️	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 Technicians (Paralegals) 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	271,320 ↗ 403/14 → \$30,940-\$49,200	Enterprising HS HW ☀️	Some lawyers hire legal secretaries and train them on the job, whereas others prefer an associate's or bachelor's degree. Must understand legal terminology. Use of word processing programs essential.
Police Detectives Conduct investigations related to suspected violations of federal, state or local laws to prevent or solve crimes.	Police Officers; Correctional Officers	109,960 → 320/9 → \$50,250-\$96,070	Enterprising HS HW	Civil service regulations govern the appointment of police and detectives in most instances. Candidates must be U.S. citizens, usually at least 20 years of age, and must meet rigorous physical and personal qualifications.
Police Patrol Officers (M) 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	635,380 → 1,040/42 → \$39,030-\$55,860	Social HS HW	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.
Security Guards (M) Guard, patrol or monitor premises to prevent theft, violence or infractions of rules.	Border Guards, Correctional Officers, Fish and Game Wardens	1,066,730 → 1,738/49 → \$20,170-\$33,000	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				
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	592,670 → 1,541/39 → \$50,300-\$111,130	Enterprising HS HW ☀️	Three years of graduate study after completion of bachelor's degree is required. Must pass a written exam to be admitted to the bar. Communication skills are essential. Highly competitive job market.

	B/JCC	BSC	CCCC	DCB	DSU	EATC	FBCC	FFS	GKFS	HAHD	JSHDF	JSHDGF	JZT	LRSC	LWT	MaSU	MBC	MIL	MISU	NDSCS	NDSU	PAR	RCB	RCF	SBC	S-ND SU	TBC	THA	TMCC	TSPA	UJ	UM	UND	UTTC	VCSU	WSC	
LAW, PUBLIC SAFETY, CORRECTIONS, SECURITY & CRIMINAL JUSTICE																																					
Criminal Justice/Studies		2-4*, A																	4G*	A	4G		2,4*	2,4*	2						4	4	4G	2		A	
Emergency Management																				A	4G																
Forensic Psychology																																					G
Forensic Science																		M																		4	
Indian Law																																					C
International Infectious Disease Management & Biosecurity																					GC																
Law (J.D.)																				A																	G
Law Enforcement														2						A																	
Paralegal/Legal Assistant																									2			1-2									
Peace Officer													1																								
Police Management & Investigation																			C																		
Private Security Officer																																					
Public Health																					G/C															G/C	
US Air Transportation Policy																																					C

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/ Proj. Openings ND Earnings	Holland Type Rating	Hiring Practices
Postsecondary Programs – Associate Degree Or Less				
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	82,770 → 342/5 → \$26,610-\$40,000	Realistic HS	Most employers prefer applicants who have completed career and technical education 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	69,830 → 416/14 → \$34,560-\$51,260	Realistic HS HW ☀️	Although it may be possible to qualify for certain engineering technician jobs without formal training, most employers prefer to hire someone with at least an associate's degree in engineering technology.
E Electrical 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	141,150 → 264/11 → \$39,490-\$62,000	Realistic HS HW ☀️	Employers prefer applicants with technical training. Must have ability to do detail work with high degree of accuracy. Hired by manufacturers and public utilities.
E Electro-Mechanical Technicians (M) Operate, test and maintain unmanned, automated, servo-mechanical or electro-mechanical equipment. May assist engineers with robotics equipment.	Electronics Technicians; Mechanical Engineering Technicians	15,540 → NA/NA \$33,490-\$80,070	Realistic HS HW	Although it may be possible to qualify for certain engineering technician jobs without formal training, most employers prefer to hire someone with at least an associate's degree in engineering technology.
E Energy Industry Manager (Managers of Production and Operating Workers) (M) 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	580,620 → 1,493/45 ↗ \$35,280-\$68,050	Enterprising HS HW ☀️	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.
E 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	396,370 → 702/36 ↗ \$36,540-\$60,140	Realistic HS HW ☀️	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.
E Machinists (M) Set up and operate a variety of machine tools to produce precision parts and instruments.	Blacksmiths, Gunsmiths, Locksmiths, Welders	391,130 → 980/48 ↗ \$32,360-\$47,220	Realistic HS HW ☀️	Completion of apprenticeship, career and technical education or on-the-job training necessary. Mechanical ability essential. Hired by manufacturers and federal government.
E Mechanical Engineering Technicians (M) Develop and test machinery and equipment. Review blueprints. Draft detail drawings. Assemble modified mechanical components. Work directly under a mechanical engineer.	Drafters, Mechanical Engineers	46,090 → 324/16 ↗ \$40,140-\$54,110	Realistic HS HW ☀️	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.
E Process Plant (Chemical Plant) Operator 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	38,890 ↘ NA/NA \$41,660-\$63,310	Realistic HS HW	Preference is given to those who have completed formal apprenticeship or career and technical education 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.
Team Assemblers Work as part of a team having to assemble an entire product or component of a product. Includes team leaders who work as part of the team.	Cutting, Punching, and Press Machine Setters; Forging Machine Setters; Solderers and Brazers	1,058,100 → 2,574/101 ↗ \$22,700-\$32,370	Realistic HS ☀️	Requires excellent manual dexterity, knowledge of safety procedures, and the ability to use power tools. Precise qualifications can vary depending on the product manufactured.
E Tool and Die Makers 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	78,700 ↘ 100/2 → \$38,620-\$52,290	Realistic HS HW	Those hired are apprenticed or are trained on the job. Persons must follow strict safety requirements because of potential danger of machines.
E 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	352,250 → 3,079/126 → \$32,200-\$57,330	Realistic HS HW ☀️	Training can be done informally on the job, through apprenticeships or formal training at secondary and postsecondary career and technical education schools. May become certified.

MANUFACTURING

	BICC	BSC	CCCC	DCB	DSU	EATC	FBCC	FFS	GKFS	HAHD	JSHDF	JSHDGF	JZT	LRSC	LWT	MaSU	MBC	MIL	MISU	NDSCS	NDSU	PAR	RCB	RCF	SBC	S-NDSU	TBC	THA	TMCC	TSPA	UJ	UM	UND	UTC	VCSU	WSC			
MANUFACTURING																																							
Auto Body Repair		1-2																		1-2																			
Automotive Technology	1-2	1-2	2											1-2						1-2														2		2			
Building Construction Technology	1-2						1,1-2													2							1-2							2					
Building Maintenance							1-2,2																		1-2														
Building Trades																																							
Carpentry, Residential	1	1-2*																																		1-2*			
Caterpillar Dealer Service																				2																			
Construction Management																					4																		
Diesel Technology																				2																	2		
Electrical																								1															
Electrical Technology		1-2*																M		2							1-2												
Electronics/Telecommunications Technology		1-2																																					
Emergency Management																				A	4G																		
Engineering & Surveying Technology, Civil																		M		2																			
Engineering Technician		2																																					
Forensic Science																																			4				
Heating, Ventilation, Air Conditioning & Refrigeration Technology		1-2																		1-2																			
Industrial Technology/Mechanical Maintenance Technology		1-2																																	4G				
John Deere Ag Technology																				2																			
Lineworker, Electrical		1-2																																					
Materials & Nanotechnology																									G														
Mechanical Systems																				2																			
Mechanics, Automotive		1-2												1-2						1-2																			
Micromanufacturing Technology																				1-2*																			
Nanoscience Technology																				2																			
Nuclear Power Technology		1-2*																																					
Occupational Safety & Environmental Health																																			4				
Oil Drilling																								1															
Petroleum Automation & Control																																						2	
Petroleum Production Technology		1-2*																																				2	
Plumbing																					1																		
Power Plant Technology		1-2*																										1-2											
Precision Machining Technology																				1-2																			
Process Plant Technology		1-2*																																					
Recreational Engines Technology																				1-2																			
Sustainable Construction Technology		1-2																																					
Technical Studies		1-2																		1-2																			
Welding		1-2*					1							1	1					1-2*			1					1										1-2	
Wind Energy Technician														1-2																									

NOTES

FAST FACT

The Manufacturing industry in North Dakota is projected to add nearly 4,000 jobs in the next decade.

PROGRAM LENGTH IS INDICATED BY:

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

SYMBOLS:

-  : Energy Occupations in North Dakota
-  : Bright Outlook

See pages 16-17 for more information on the contents of these charts.

MARKETING



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

Occupational Title/Description	Related Occupations	Nat'l Employment ND Employment/ Proj. Openings ND Earnings	Holland Type Rating	Hiring Practices
Postsecondary Programs – Associate Degree Or Less				
Advertising Sales Agents 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	148,770 ↘ 515/17 → \$24,120-\$51,070	Enterprising HW	Training ranges from a high school diploma to a bachelor's degree depending on the product complexity and company policies. Must be outgoing, enthusiastic, and persuasive. Good communication skills essential.
Buyers and Purchasing Agents, Wholesale and Retail Purchase merchandise or commodities for resale or processing. Inspects and grades or appraises durable goods, apparel, furniture, or other merchandise offered for sale to determine value and yield.	Sales Representatives, Retail Sales Workers, Sales Managers	396,770 → 919/34 → \$34,950-\$65,810	Enterprising HS HW ☀	Businesses prefer to hire applicants who are familiar with the merchandise they sell as well as with wholesaling and retailing practices.
Cashiers 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	3,343,470 → 12,023/631 → \$16,940-\$21,240	Conventional ☀	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	430,700 → 1,139/44 → \$17,910-\$36,840	Conventional ☀	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	1,800,410 ↘ 4,636/155 → \$18,430-\$31,710	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.
Drivers/Sales Workers (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	396,470 → 1,758/52 → \$16,840-\$36,990	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.
Floral Designers (Florists) Design, cut and arrange live, dried or artificial flowers or foliage.	Retail Salesperson, Store Manager, Horticulturist	46,490 ↘ 342/9 ↘ \$16,900-\$20,290	Artistic	Some employers prefer or require technical training. Must like working with flowers and plants. Long hours at holidays.
Funeral Service Directors, Morticians and Undertakers 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	24,280 → 85/3 → \$59,940-\$87,480	Enterprising HS HW	An associate's degree is required prior to 1 year's training at a school of mortuary science, a 12-month apprenticeship is required before taking national and state board examinations. Some have a bachelor's 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	197,820 → 1,174/26 → \$20,440-\$50,570	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 Sales Managers and Supervisors 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	1,213,550 → 4,263/140 → \$25,710-\$45,950	Enterprising HS ☀	Some employers prefer a 4-year degree, others require career and technical education training. Experience may increase job opportunities. Some managers are hired through internal promotion.
Retail 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	1,756,600 → 5,785/196 → \$33,880-\$90,595	Enterprising HW ☀	Employers prefer formal training in marketing, sales, or business, others may hire high school graduates and train them over a 2-year period. Hired by manufacturers.
Salespersons, Parts Sell spare and replacement parts and equipment in repair shop of parts store.	Auto Mechanic, Sales Representatives	221,270 → 1,401/53 → \$25,120-\$43,060	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 (M) Sell merchandise, such as furniture, cars, appliances and apparel in a retail store.	Sales Route Drivers, Real Estate Agents, Insurance Agents	4,485,180 → 12,974/632 → \$16,980-\$33,820	Enterprising ☀	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.

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/ Proj. Openings ND Earnings	Holland Type Rating	Hiring Practices
Postsecondary Programs – Associate Degree Or Less				
E 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.	71,590 → NA/NA \$25,780-\$43,700	Realistic HS	Most employers prefer applicants with at least 2 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.
E 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	63,880 → 76/4 ↗ \$32,930-\$62,230	Realistic HS HW	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.
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	47,950 → 187/9 ↗ \$32,600-\$51,780	Realistic ☀️	Most employers prefer applicants with career and technical education 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				
E 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	87,560 → 110/4 → \$46,500-\$78,780	Investigative HS HW	Bachelor'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.
E Conservation 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	18,590 → 220/6 → \$43,100-\$73,710	Investigative HS HW	Minimum requirement is a bachelor's degree. Some are hired by extension services or local and state government. Others may teach at universities or work in private industry.
E 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	2,590 → 44/1 → \$50,580-\$71,750	Investigative HS HW	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.
E Engineers, Chemical (M) 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	33,300 → 74/4 ↗ \$59,320-\$158,980	Investigative HS HW	A bachelor's degree is required; however, some employers require a master's degree. Many are hired by manufacturing industries, primarily in chemical and petroleum refining. Also employed by consulting firms. Must be licensed.
E 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	262,170 ↗ 931/54 ↗ \$49,030-\$81,500	Realistic HS HW ☀️	An increasing number of employers are requiring a master's 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.
E 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	168,100 → 266/12 ↗ \$58,230-\$92,760	Investigative HS HW ☀️	Employed by manufacturers of electrical and electronic equipment, aircraft, and business machines. Some work for public utilities, government agencies, and universities. Must be licensed.
E 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	230,580 → 729/44 ↗ \$46,900-\$82,560	Enterprising HS HW ☀️	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.
E 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	258,630 → 545/30 → \$55,610-\$86,800	Realistic HS HW ☀️	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.

SCIENCE, TECHNOLOGY, ENGINEERING & MATHEMATICS

	BJCC	BSC	CCCC	DCB	DSU	EATC	FBCC	FFS	GFKFS	HAHD	JSHDF	JSHDGF	JZT	LRSC	LWT	MaSU	MBC	MIL	MISU	NDSOS	NDSU	PAR	RCB	RCF	SBC	S-NDU	TBC	THA	TMCC	TSPA	UJ	UM	UND	UTTC	VCSU	WSC		
SCIENCE, TECHNOLOGY, ENGINEERING AND MATHEMATICS (STEM)																																						
Entomology																																					4	
Environmental Technology				2	4																																	
Environmental Technology/Lab & Field Tech				2																																		
Environmental Technology/Water Management				2																																		
Forensic Science																				1-2																		
General & Technical Studies																				1-2	G											4						
Genomics & Bioinformatics																				1-2																	C	
Geographic Information Science																																					4G	
Geography																						4															4G	
Geology																			4		C																	
Greenhouse Technology				1-2*																																		
Heating, Ventilation, Air Conditioning & Refrigeration Technology		1-2																		1-2																		
History					4*													4		4G											4		G		4	A		
Industrial Technology/Mechanical Maintenance Technology		1-2																																	4G			
Instrumentation & Control Technology		1,1-2*																																				
John Deere Ag Technology																				2																		
L& Surveying & Civil Engineering Technology																				2																		
Landscape Design/Technology				1-2*																																		
Materials & Nanotechnology																					G																	
Mathematics			A	4		2										4*			4G	4G											4	4	4G		4	A		
Microbiology																				1-2																		
Microelectronics Technology																																				4		
Micromanufacturing Technology																				1-2																		
Molecular & Integrative Biology																					G														4G			
Molecular Pathogenesis			A																																G			
Nanoscience Technology																				2																		
Nuclear Power Technology		1-2																																				
Petroleum Production Technology		1-2*																																				
Pharmacology, Physiology & Therapeutics																				A															4		A	
Physical Science																					4G													4G			A	
Physics																					4G																	A
Plant Pathology																					4														4			
Political Science					4																										4						A	
Power Plant Technology		1-2*																																				
Process Plant Technology		1-2*																																				
Recreational Engines Technology																					1-2																	
Renewable Generation Technology		1-2*																																				
Science, General							2													G															G			
Scientific Computing			A														4				4G														4		4	
Simulator Maintenance Technology													2																									
Social Science					4*															4												4	G				A	
Space Studies		2A		2																	2																	
Statistics																					C,4G																	
Sustainable Construction Technology		1-2																																				
Transfer/Pre-Professional/University Parallel																					4G																	
Tribal Environmental Science							2,4																													2		
Urban Forestry Technology				1-2*																																		
US Air Transportation Policy																																				4C		
Veterinary Technology																					4																	A
Wildlife & Fisheries Technology/Science				2																																4		
Zoology																					4G																	

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/ Proj. Openings ND Earnings	Holland Type Rating	Hiring Practices
Postsecondary Programs – Associate Degree Or Less				
Air Traffic Controllers (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	23,060 → 112/6 → \$67,600-\$95,120	Conventional HS HW	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	115,410 → 221/16 ↑ \$36,160-\$55,690	Realistic HS HW ☀️	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	134,650 → 796/27 → \$22,450-\$43,950	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	604,990 → 2,842/94 → \$27,220-\$46,270	Realistic HS ☀️	Preference given to an apprenticeship or career and technical education trained applicant. Hired by repair shops, government and supply shops. May be self-employed.
Bus Drivers Drive bus or motor coach, including regular route operations, charters and private carriage.	Truck Drivers, Taxi Drivers	653,940 → 1,777/62 ↗ \$23,670-\$34,965	Realistic HS ☀️	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.
E 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	238,150 → 2,089/55 → \$34,930-\$52,960	Realistic HS HW ☀️	High school graduation is required and career and technical education or apprenticeship training preferred by employers. Hired by construction companies, bakeries, dairies, schools, and government.
Dispatchers, Truck and Taxi (Radio) (M) Schedule and dispatch workers, work crews, equipment, or service vehicles for conveyance of materials, freight, or passengers, or for normal installation, service, or emergency repairs rendered outside the place of business. Duties may include using radio, telephone, or computer to transmit assignments and compiling statistics and reports on work progress.	Dispatchers, Emergency Services; Cargo and Freight Agents; Production Clerks	185,270 → 823/37 → \$29,580-\$57,490	Conventional HW ☀️	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.
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	34,840 → 835/42 ↗ \$28,300-\$43,850	Realistic HS ☀️	Prefer high school graduate with past experience, career and technical education, or apprenticeship training. Farm background an advantage.
Flight Attendants (M) Greet passengers, verify tickets and help locate seats, serve meals and beverages. Observe passengers to detect signs of discomfort.	Gate Agents, Host/Hostesses	93,550 ↓ NA/NA \$28,910-\$67,290	Enterprising HS HW	Preference is given to those with 2 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.
Freight/Stock and Material Handlers (M) Manually move freight, stock, or other materials or perform other general labor.	Industrial Truck and Tractor Operators; Reinforcing Iron and Rebar Workers; Fence Erectors	2,284,650 → 5,924/264 → \$19,890-\$34,670	Realistic HS ☀️	Employers often require that workers be 18 years of age or older. They may also require applicants to pass background checks, physical exams, and drug tests. Most jobs require reading and basic math skills. Employers look for people who are reliable and hard-working.
E 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	170,720 → 1,335/54 → \$38,320-\$63,370	Realistic HS HW ☀️	Prefer high school graduate with past experience, career and technical education, military or apprenticeship training. Must have an aptitude for mechanical work. Hired by mining companies and heavy equipment dealers.
Maintenance and Repair Workers (M) Keeps machines, equipment, or buildings in good repair.	Control Valve Installers and Repairers, Pipefitters and Steamfitters, Plumbers	1,249,080 → 2,984/98 → \$25,650-\$47,730	Realistic HS ☀️	Must have good oral communication skills, be able to prioritize tasks and work independently, and be able to lift 50 pounds.
Postal Mail Carriers Sort mail for delivery. Deliver mail on established route by vehicle or on foot.	Delivery-Route Truck Drivers, Newspaper Carriers	307,490 ↓ 826/29 ↓ \$37,710-\$53,010	Conventional HW	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	17,930 ↓ 270/6 → \$39,580-\$61,540	Enterprising HS HW	Postmasters are appointed from within the postal service. Appointees should have good communication, managerial and finance coordination skills and demonstrate initiative.

TRANSPORTATION, DISTRIBUTION & LOGISTICS

Occupational Title/Description	Related Occupations	Nat'l Employment ND Employment/ Proj. Openings ND Earnings	Holland Type Rating	Hiring Practices
Small Engine Mechanics 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	62,860 → 283/8 → \$26,760-\$41,047	Realistic HS	Employers may prefer applicants with career and technical education 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.
E Truck Drivers (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	2,362,230 → 19,501/406 → \$28,535-\$46,775	Realistic HW ☀️	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.
Postsecondary Programs – Bachelors Degree or More				
Airline and Commercial 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	110,370 → 280/13 → \$56,475-\$82,565	Realistic HS HW ☀️	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.
Transportation Managers (M) Direct transportation, logistics, and inventory control operations.	Logistics Managers, Supply Chain Managers, Transportation Planners	102,610 → 474/15 → \$61,810-\$96,950	Enterprising HS HW	Usually requires at least a two-year degree, often a bachelor's, and 3-5 years' experience in logistics. Knowledge of Microsoft Office and a high comfort level with technology are helpful.

	BICC	BSC	CCCC	DCB	DSU	EATC	FBCC	FFS	GKFS	HAHD	JSHDF	JSHDGF	IZT	LRSC	LWT	MaSU	MBC	MIL	MISU	NDSCS	NDSU	PAR	RCB	RCF	SBC	S-NDU	TBC	THA	TMCC	TSPA	UJ	UM	UND	UTTC	VCSU	WSC			
TRANSPORTATION, DISTRIBUTION & LOGISTICS																																							
Aeronautics																																				4			
Airport/Aviation Technology Management																																					4		
Auto Body Repair		1-2																		2																			
Automotive Technology		1-2												1-2							1-2																	1,2	
Aviation						2		2										M				2														6			
Caterpillar Dealer Service																					2																		
Commercial Drivers License (CDL)																									1														
Commercial Pilot						2		2	2									M				2																	
Diesel Technology																		M			2																	1,2	
Industrial Technology/Mechanical Maintenance Technology		1-2																																			4G		
John Deere Ag Technology																					2																		
Recreational Engines Technology																					1-2																		
Simulator Maintenance Technology														2																									
Space Studies																																					6		
Supply Chain Management																						6															4		
Transportation & Urban Systems																						1-2,6																	
Truck Driving																		M			C																		
Unmanned Aircraft Systems Operations																						4																	

NOTES

FAST FACT

The Transportation industry in North Dakota is projected to add nearly 2,000 jobs in the next decade.

PROGRAM LENGTH IS INDICATED BY:

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

SYMBOLS:

- E : Energy Occupations in North Dakota
- ☀️ : Bright Outlook

See pages 16-17 for more information on the contents of these charts.

Getting Started in the ENERGY INDUSTRY



What should I expect as an employee in the industry?

- Working in various temperatures, heights and spaces
- Working days, nights, weekends and holidays in shift hours
- Ability to pass random drug testing

What kind of work is it?

- Operating, troubleshooting and repairing equipment
- Using computers, heavy machinery, instruments and tools
- Working in teams and separately
- Using math and science

Where can I work?

- Natural Gas Facilities
- Petroleum Production Companies
- Electric Cooperatives
- Utility Companies
- Power Plants
- Wind Farms
- Solar Facilities
- Ethanol and Biodiesel Plants
- Water Treatment Plants
- Maintenance Contracting Companies
- Nuclear Plants
- Food Processing Plants

How do I meet those qualifications?

- Enroll with one of the following North Dakota colleges on campus or online
 - Bismarck State College – bismarckstate.edu/energy
 - Lake Region State College – lrsc.edu
 - North Dakota State College of Science – ndscs.edu
 - Williston State College – willistonstate.edu
- Certificate and degree options can be completed in 1, 2 or 4 years

**Energy Industry Jobs
in North Dakota**
<http://jobsnd.com>

Look for the **E** in the Occupational Section, pages 19-52, for energy occupations in North Dakota.





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BUILD A BETTER FUTURE

The North Dakota Army National Guard can help you build a better future with tuition assistance, a monthly paycheck, and paid skills training, all while developing leadership skills and expanding career experiences. Choose from a number of career fields and get valuable skills training, while attending college tuition free!



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moment of honor

Gain valuable job skills in a number of career fields, all while attending college, tuition free!

- Engineer
- Environmental Planner
- Human Resources
- Plumber
- Electrician
- Construction
- Surveyor
- Paralegal / Legal Specialist
- Health Care Specialists
 - Patient Administration
 - Dental Specialist
 - Doctor
 - Nurse
- Mechanic
- Heavy Equipment Operator
- Information Technology
- Public Information
- Water Treatment Specialist
- Supply Chain Management
- Logistics Specialist
- Chaplain / Pastor
- Police Officer / Security
- Accountant
- Safety Officer
- Firefighter
- Truck Driver
- Food Service Specialist
- Small Arms Repairer
- Heavy Equipment Mechanic
- Light-Wheel Vehicle Mechanic
- Counselor / Social Worker
- Videographer / Photographer
- Machinist / Metal Worker
- Air Traffic Control Operator
- **Many More Career Options and Training Available!**

*Hands-on
Technical
Training
in Real-life
Careers!*

Blake Murphy
2014 Bismarck HS
Graduate

Cambrie Leben,
2014 Bismarck HS
Graduate



See below for branch information

AIR FORCE

www.airforce.com
Fargo • 701-277-1818
Grand Forks • 701-775-9361
Bismarck/Minot • 701-839-4635

AIR NATIONAL GUARD

www.goang.com
1-800-972-8825

ARMY NATIONAL GUARD

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

ARMY & ARMY RESERVE

www.goarmy.com
Western ND • 701-223-5455
Eastern ND • 701-277-1299

ASVAB CAREER EXPLORATION PROGRAM

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

COAST GUARD

www.gocoastguard.com

MARINES

www.marines.com
Bismarck • 701-223-3019
Fargo • 701-277-8403
Grand Forks • 701-772-3627
Minot • 701-839-2091

NAVY

www.navy.com
1-800-872-6289
Fargo • 701-277-1096 (Enlisted)
Fargo • 701-239-5091 (Officer)

UNITED STATES MILITARY ACADEMY

www.usma.edu
West Point, NY
1-845-938-4041

UNITED STATES NAVAL ACADEMY

www.usna.edu
Annapolis, MD
1-410-293-4361

UNITED STATES COAST GUARD ACADEMY

www.cga.edu
New London, CT
1-800-883-8724

UNITED STATES AIR FORCE ACADEMY

www.academyadmissions.com
Colorado Springs, CO
1-800-443-9266

UNITED STATES MERCHANT MARINE ACADEMY

www.usmma.edu
Kings Point, NY
1-516-726-5800

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, are currently teaching, or need to add endorsements in critical teaching fields. For further information, please consult the Lewis & Clark Region TTT website at www.montana.edu/ttt or call 1-866-478-3224.

“HOW CAN I TAKE COURSES? LET ME COUNT THE WAYS...”



Dual Credit Courses

North Dakota University System colleges and universities, in partnership with area high schools, offer several CTE and general education courses for dual credit. Many schools award dual credit for the college class in lieu of their high school class equivalent so students are earning high school and college credits at the same time.

Advantages of Dual Credit Courses:

- You can start college a class or two ahead by successfully completing the dual credit courses in high school.
- Students and parents can save on the cost of a college education by not having to pay full tuition for those courses.
- Students can ease into college classes in a comfortable, familiar environment with smaller class sizes.
- The letter grade received in the course is the same and is posted on both high school and college transcripts.
- Successful completion of a dual credit class can fulfill one of the requirements of the North Dakota Academic Scholarship.



DISTANCE EDUCATION COURSES

The North Dakota University System (NDUS) has made access to a college education easier than ever. NDUS offers more than 300 programs entirely online through its system of 11 colleges and universities. These virtual learning opportunities provide students the freedom to choose courses from several campuses while completing just one application. Distance education college classes are offered through the following methods:

- Online
- IVN (Interactive Video Network)

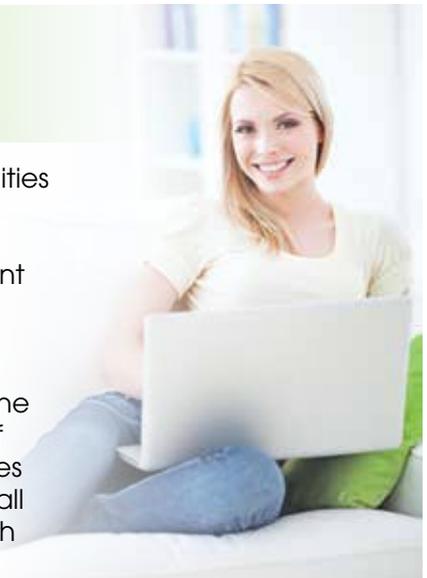
Individual online courses are also available for some traditional students who prefer a mix of on-campus and online courses.

For more information about these opportunities, go to www.ndus.edu/students/online-courses-degrees.

Take Classes At Home

Are education opportunities limited by where you live? Not at all! Today's high school or adult learner student can access education via online courses. The North Dakota Center for Distance Education is accredited by the North Dakota Department of Public Instruction. This provides opportunities for students of all ages who do not have a high school diploma to:

- Take courses that aren't offered locally,
- Continue their education while homebound, disabled or even living in another country,
- Earn a high school diploma through alternative methods.



For more information, contact your school counselor or:

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 Admission Requirements

If you plan to attend a North Dakota University System (NDUS) college or university, it is important to understand the admission requirements for the institution you wish to attend. You CAN go to college if you have a high school diploma or GED! Check out the admission requirements below to help you find the school that is the best fit for you and your goals.

2-year college admission requirements:

- A beginning freshman applicant who is a high school graduate may be admitted to any two-year campus. Each campus may have admission requirements that are in addition to the general admission requirement. It is important to contact the NDUS campus for details.
- GED tests may be used to satisfy the high school graduation requirement.
- For technical programs, high school graduation is recommended. However, applicants 17 years of age or older may be admitted if the applicant successfully meets program standards.

4-year college admission requirements:

- 4 units of English
- 3 units of mathematics (Algebra I and above)
- 3 units of lab science (including at least two in biology, chemistry, physics or physical science)
- 3 units of social studies (not including consumer education, cooperative marketing, orientation to social science, or marriage/family)

Although not required, it is recommended that if you desire to attend a 4-year institution, that you also take advanced algebra and at least two foreign language courses in high school.

Additional courses may be required before you can be admitted to some college programs.

Students who do not meet the credit requirements for a 4-year university are welcome to attend one of the five 2-year colleges. Upon satisfactory completion of 24 credits, the student will be eligible to transfer to a 4-year university.

WHY GO TO COLLEGE?

Americans with a bachelor's degree and no further education working full time earn 65% more than high school graduates over their lifetime. Associate degree-holders working full time earn 27% more than a high school graduate over their lifetime.

**Based on median earnings in 2011
— Education Pays 2013, Published by the College Board*



Transfer Made Simple

Are you planning to start at one school and finish at another? The North Dakota University System 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.ndus.edu and select the "Students" tab, then click "Easy Transfer within or to North Dakota Campuses." You can also call the Director of Systemwide Student Entry, Transfer, and Retention at 701-858-3494.

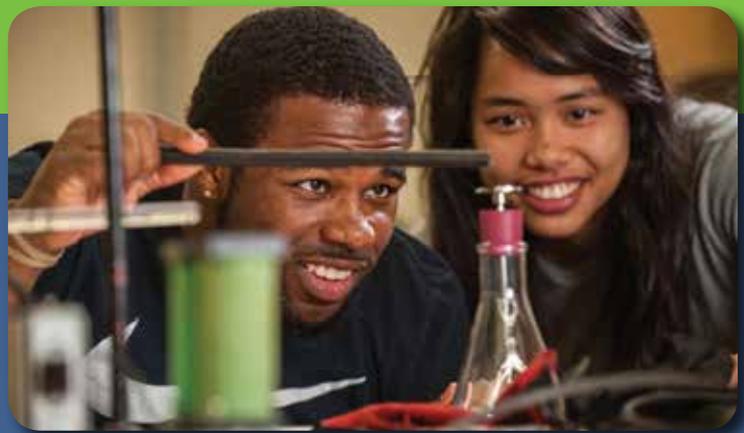


Why Choose a North Dakota College or University?

With five colleges and six universities, the North Dakota University System is sure to offer a college experience that's just right for you. From one-year technical and vocational programs to professional degrees in law, medicine and pharmacy – the North Dakota University System will help prepare you to meet your career goals.

At North Dakota colleges and universities it's all about YOU! NDUS institutions offer:

- **BREADTH AND QUALITY OF PROGRAMS:** From welding to web design, engineering to English, anatomy to accounting – the North Dakota University System colleges and universities offer more than 700 programs.
- **COST:** Tuition and fees at North Dakota University System colleges and universities are competitively priced when compared to regional and national counterparts. Plus, it won't break the bank to go home for a weekend.
- **ROOM TO GROW:** The faculty and staff at North Dakota University System colleges and universities want you to be personally and professionally successful. They are committed to creating an environment where you will be intellectually challenged and encouraged to spread your wings.
- **TONS OF FUN:** North Dakota University System colleges and universities field more than 100 varsity and 600 intramural teams. Not into sports? Try student government, music or one of the 750 clubs and student organizations. Add in dances, concerts, plays and other opportunities to pursue your interests, and you've got the recipe for a great experience.
- **LIFE IN A GLOBAL COMMUNITY:** People from many nations and diverse backgrounds challenge the thinking and perspectives of students at North Dakota University System colleges and universities.
- **A SAFE, SECURE ENVIRONMENT:** There's a lot to be said for living in a state that has one of the lowest crime rates in the nation. How's this for starters? Peace of mind.
- **MEMORIES AND FRIENDSHIPS TO LAST A LIFETIME:** What will you remember most about your college days? Whatever events make their mark on you, some of the people who share these memories are likely to be part of your life well beyond your time on campus.



HOW DO I KNOW WHICH SCHOOL IS THE RIGHT FIT FOR ME?

The most important thing to consider when choosing a college is whether it's the right 'fit' for you. Here are some things that can help get you started.

- Check their admission requirements. If you don't have the required credits for admission, put that school aside for now. If you've got your heart set on a 4-year institution, you can transfer there after earning 24 credits at a NDUS community college.
- If you know what program you would like to study, find out what schools offer it at NDChoose.com/programs.
- Do you prefer larger classes with more options or a more personal approach? The answer to this question can help you determine what size of campus is the best fit for you. As your classes become more specific to your major, class sizes tend to get smaller.
- Visit the campus! This is the most important step and is the best way to determine if a school is a good fit for you. While there, make it a point to talk to students and ask questions. If you can't visit the campus in person, many schools now offer an online tour option that allows you to see what campus life would be like.
- Compare your financial aid options at each institution to make sure you're making the most of your educational investment.

Explore the possibilities at NDChoose.com.

Checklist for Admission to a College or University



- Select more than one campus for consideration. NDChoose.com is a great place to start.
- Take a look at each campus's online course catalogues. You can visit each NDUS campus's page at NDChoose.com and click through to their website.
- Make appointments to tour the selected campuses (contact admissions office).
- Take the ACT – colleges can provide testing dates, or go to www.actstudent.org.
- 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.
- Prepare parent and student (if applicable) income tax forms as soon as possible after January 1, 2015, for use in completing the Free Application for Federal Student Aid (FAFSA) form.
- Complete the 2015-16 FAFSA form to apply for federal and state grants and loans. The NDUS priority FAFSA deadline is April 15.
- Weigh your options, including financial aid packages, and select a college or university.
- Get ready for the experience of a lifetime!

NORTH DAKOTA: 2014-2015 ESTIMATED ON-CAMPUS BUDGETS FOR RESIDENT DEPENDENT STUDENTS

FAFSA CODE	SCHOOL	MAILING ADDRESS	FINANCIAL AID PHONE NUMBER	ADMISSIONS PHONE NUMBER	TUITION & FEES	BOOKS & SUPPLIES	ROOM & BOARD	TOTAL
2988	Bismarck State College www.bismarckstate.edu	PO Box 5587 Bismarck ND 58506	701-224-5494 800-445-5073	701-224-5429 800-445-5073	\$4,222	\$1,000	\$6,156	\$11,378
15793	Cankdeska Cikana Community College www.littlehoop.edu	PO Box 269 Fort Totten ND 58335	701-766-1374 888-783-1463	701-766-1342 888-783-1463	\$3,300	\$700	\$4,000	\$8,000
2995	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	\$4,098	\$1,100	\$5,669	\$10,867
2989	Dickinson State University www.dickinsonstate.edu	291 Campus Dr Dickinson ND 58601	701-483-2371 800-279-4295	701-483-2175 800-279-4295	\$6,050	\$1,200	\$5,850	\$13,100
15536	Fort Berthold Community College www.fortbertholdcc.edu	PO Box 490 New Town ND 58763	701-627-4738 Ext. 236	701-627-4738	\$4,200	\$1,000	\$3,800 ³	\$9,000
16232	Headquarters Academy of Hair Design http://hqacademyofhair.com/	108 S Main St Minot ND 58701	701-852-8329 800-891-5135	701-852-8329 800-891-5135	\$12,000	\$380	\$8,880 ³	\$21,260
7756	Josef's School of Hair Design, Inc. www.jsohd.com	627 NP Ave Fargo ND 58102	701-235-0011 800-201-0012	701-235-0011 800-201-0012	\$13,100	\$1,185	\$7,700 ³	\$21,985
10406	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	\$1,185	\$7,700 ³	\$21,985
10406-02	Josef's School of Hair Design, Inc. www.jsohd.com	4501 15th Ave SW Fargo ND 58103	701-235-9910 800-201-0012	701-478-6292 800-201-0012	\$17,200	\$1,570	\$7,700 ³	\$26,470
12295	JZ Trend Academy Paul Mitchell Partner School - www.jztrendacademy.edu	1320 Tacoma Ave Bismarck ND 58504	701-223-8804	701-223-8804 800-767-5079	\$14,395	\$2,000	\$11,750 ³	\$28,145
2991	Lake Region State College www.lrsc.edu	1801 College Dr N Devils Lake ND 58301	701-662-1517 800-443-1313	701-662-1514 800-443-1313	\$4,075	\$1,000	\$5,537	\$10,612
2993	Mayville State University www.mayvillestate.edu	330 3rd St NE Mayville ND 58257	701-788-4767 800-437-4104	701-788-4667 800-437-4104	\$6,489 ⁴	\$1,000	\$6,452	\$13,941
2994	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	\$6,224	\$1,100	\$5,620	\$12,944
16929	Moler Barber College of Hairstyling http://molerbarberfargo.com	16 S 8th St Fargo ND 58103	701-232-6773	701-232-6773	\$5,480	\$855	\$5,335 ³	\$11,670
9354	NDSU Nursing at Sanford Health www.ndsu.edu	512 N 7th St Bismarck ND 58501	701-224-3800	701-224-3800	\$7,820	\$1,100	\$7,484	\$16,404
2996	North Dakota State College of Science www.ndscs.edu	800 N 6th St Wahpeton ND 58076	701-671-2207 800-342-4325 Ext. 32207	701-671-2521 800-342-4325 Ext. 32521	\$4,438 ⁶	\$1,000	\$5,526	\$10,964
2997	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	\$7,820	\$1,100	\$7,484	\$16,404
4846	Rasmussen College www.rasmussen.edu	1701 E Century Ave Bismarck ND 58503	701-530-9600 877-530-9600	701-530-9600 877-530-9600	\$12,114 ⁷	\$0	\$7,740 ³	\$19,854
4846	Rasmussen College www.rasmussen.edu	4012 19th Ave SW Fargo ND 58103	701-277-3889 800-817-0009	701-277-3889 800-817-0009	\$12,114 ⁷	\$0	\$7,740 ³	\$19,854
14993	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	\$5,796	\$10,906
41394	The Hair Academy www.thehairacademynd.com	2101 East Broadway Ave Bismarck ND 58501	701-255-3547 800-793-9594	701-255-3547 800-793-9594	\$10,920	\$1,499	\$11,605 ³	\$24,024
40313	The 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	\$15,790	\$2,180	\$11,452 ³	\$29,422
12059	Trinity Bible College www.trinitybiblecollege.edu	50 S 6th Ave Ellendale ND 58436-7150	888-822-2329	888-822-2329	\$14,620	\$1,500	\$5,500 ⁵	\$21,620
9450	Turtle Mountain Community College www.tm.edu	PO Box 340 Belcourt ND 58316	701-477-7862	701-477-7862	\$2,050	\$200	\$3,664 ³	\$5,914
14470	United Tribes Technical College www.uttcc.edu	3315 University Dr Bismarck ND 58504	701-255-3285 Ext. 1385 888-643-8882	701-255-3285 Ext. 1334 888-643-8882	\$3,840	\$1,400	\$2,660	\$7,900
2990	University of Jamestown www.uj.edu	6085 College Lane Jamestown ND 58405	701-252-3467 Ext. 5556	701-252-3467 Ext. 5562 800-336-2554	\$19,170	\$1,000	\$6,780	\$26,950
2992	University of Mary www.umary.edu	7500 University Dr Bismarck ND 58504	701-255-7500 800-288-6279	701-255-7500	\$16,100	\$1,202	\$6,022	\$23,324
3005	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	\$7,740	\$1,000	\$6,810 ⁸	\$15,550
3008	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	\$6,704 ^{1,4}	\$1,200	\$5,938	\$13,842
3007	Williston State College www.willistonstate.edu	1410 University Ave Williston ND 58801	701-774-4248 888-863-9455	701-774-4210 888-863-9455	\$4,445	\$1,100	\$7,816	\$13,361

Note: Totals do not include Personal, Recreation or Miscellaneous costs which average approximately \$3,400. Costs may be different for specialized programs. Contact the college for more information.

Tuition and Fee Estimator:

With the use of a web-based tuition and fee estimator, parents and students can make cost comparisons among the 11 North Dakota University System colleges and universities. To use the estimator, visit <http://fees.ndus.edu>.

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, seven-day plan.
- 6 Based on 16 credits per term.
- 7 Based on 12 credits per term.
- 8 Contact campus housing for actual costs.



Searching for a Job?

THE STARTING POINT

Identify the sources of help and information in your area. A school counselor, college career services, Job Service North Dakota, and the public library are good resources that can help you. You should also consider online job search sites.

PREPARATION IS NECESSARY

Have an up-to-date, basic resume ready at all times. Customize the resume for each job application by aligning your qualifications to the job description. Emphasize the skills you have that match the job requirements. Involvement in activities such as athletics, youth

groups and volunteering are also beneficial.

A cover letter is your introduction to the employer and should accompany your resume. The letter should be easily modified for each job.

Ask your references for permission to include their contact information in the job application. Have copies of recommendation letters available.

Be aware that your social networking information may be screened for explicit photos and unprofessional comments by potential employers. Edit your social networking sites to give the impression of the professional image that you would like to project – if you don't want your grandma to see it, don't post it.

You cannot control content that

your friends might post about you. Check your profile regularly to see what comments have been posted. You might also want to consider using the “block comments” feature. Everything on the Internet is archived and there is no eraser!

BE PERSISTENT

Consider all possibilities when searching for the next job. Networking is one of the most successful ways to find a job.

When you have an interview scheduled, explore the company's website to learn as much about the company as you possibly can.

HELPFUL LINKS:

- www.jobsnd.com
- www.careeronestop.org
- www.ajb.org
- www.rileyguide.com

Steve Beutler, Minot High School, has created a job search tool kit that will help you with 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.

LEARNING EXPERIENCES OUTSIDE OF THE CLASSROOM

Employers hire candidates with the best combination of education, experience, and personal qualities. Make your career plans happen by gaining real work experience.

Put your talents to work in extended learning experiences – learning that takes place in the world of work, beyond the classroom. Go to www.nd.gov/cte/crn and click on Extended Learning Experiences in the **Student** column to learn more about these options:

- Job Shadowing and Mentoring
- Internships
- Volunteer Service and Service Learning
- Cooperative Education
- Career Camps
- Part-time Jobs and Summer Employment
- School-Based Businesses and Work Simulations
- Apprenticeship Programs
- On-the-Job Training

Seek out opportunities in your community that match your career interests. Your counselor may also be able to assist you.



North Dakota Entrepreneurship... *is it for you?*

Kinzey Whitty has been working in the fashion industry since she was a teenager. She credits her Mom, Debbie, with helping her develop an entrepreneurial spirit and strong work ethic. She learned to work hard and compete through DECA involvement while at Minot High School. A strong performance at National DECA competition provided scholarship money to attend the Fashion Institute.

Kinzey started working at the “ground floor” of her first job at Fiancee, and advanced to starting a seasonal sister store for prom attire. During college, she had an internship in the wardrobe department of Jimmy Kimmel Live! The internship was a result of Kinzey’s persistence in working with the costume designer to provide an opportunity that was an amazing experience.

KooKoo’s Nest, started in June 2013, is a mobile and online women’s and young ladies boutique. Kinzey has learned a lot about consumer behavior, finances, purchasing, and driving and parking a 30-foot long truck named Bernice! The boutique can be found at events, parties, and even on the street like a food truck. “An entrepreneur’s work is NEVER done” according to Kinzey. Business communication skills are important because of the time needed for emails, social media, online orders and phone calls. Her favorite thing is the customer interaction with her clients, whom she now considers friends.

The unique logo for KooKoo’s Nest was created by a friend. “Branding is EVERYTHING, because when you own the business, you are the brand!” states Kinzey. The logo represents the business, and introduces clients to the merchandise. Future business plans include strengthening the website www.shopkookoosnest.com and increasing online sales. She plans to keep costs low, which can then be passed on to the customers.

Kinzey LOVES to work, and understands that you must work hard when you own a business. Her advice for future entrepreneurs is to read books by other business owners and get inspired!



Kinzey Whitty:

Founder and Owner, KooKoo’s Nest

College: Fashion Institute of Design and Merchandising – Los Angeles



- Do you have a skill or service that is marketable in today’s economy?
- Do you have potential clients or customers?
- Are you a hard and diligent worker?
- Do you have good planning and organizational skills?
- 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?
- 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?

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 Kids**
210 N 4th St, Bismarck ND 58501
701-663-0150 or 888-384-8410
www.marketplaceforkids.org

or visit www.InnovateND.com

HELPFUL RESOURCES

Postsecondary Institutions

www.nd.gov/cte/crn/docs/EdDir.pdf

Area Career and Technical Centers

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

Information Technology

Information Technology career videos, salary information, skill sets, free software, 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 State College
701-323-4530 • www.bismarckschools.org/adultlearning

Devils Lake Adult Learning Center

Lake Region State College • 701-662-1568

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 Learning Center

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

Jamestown Adult Learning Center

James Valley Career Technology Center
701-252-8841

Minot Adult Learning Center

Minot Public Schools • 701-857-4488

New Town Adult Learning Center

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 Learning Center

North Dakota State College of Science
701-671-2184

West Fargo Adult Learning Center

West Fargo Public Schools • 701-356-2008

Williston Adult Learning Center

Williston State College
701-572-5886 • www.adultlearningcenter.com

See page 10 or visit www.dpi.state.nd.us/adulted for more information about the programs and services available at ALCs.

JOB SERVICE NORTH DAKOTA

Beulah

119 E Main
701-873-5607

Bismarck-Mandan

1601 E Century Ave
701-328-5000

Devils Lake

301 College Dr S
701-662-9300

Dickinson

66 Osborn Dr
701-227-3100

Fargo

1350 32nd St S
701-239-7300

Grafton

927 12th St W
701-352-4450

Grand Forks

1501 28th Ave S
701-795-3700

Harvey

119 9th St W
701-324-4552

Jamestown

1307 12th Ave NE
Ste 3
701-253-6200

Minot

3416 N Broadway
701-857-7500

New Town

204 Main St
701-627-4390
701-857-7500

Oakes

924 S 7th St
701-742-2546

Rolla

103 E Main Ave
701-477-5631

Valley City

325 2nd Street NW
701-845-8860

Wahpeton

524 2nd Ave N
701-671-1550

Williston

422 1st Ave W
701-774-7900

www.jobsnd.com *Statewide TTY 800-366-6888

VOCATIONAL REHABILITATION/ HUMAN SERVICES REGIONAL OFFICES

Bismarck

701- 328-8800
888-862-7342 (toll free)
ND Relay 1-800-366-6888
1237 West Divide Avenue Suite #2
Bismarck, ND 58501

Devils Lake

701-665-2235
888-607-8610 (toll free)
ND Relay 1-800-366-6888
200 Highway 2 SW
P.O. Box 650
Devils Lake, ND 58301-0650

Dickinson

701-227-7600
888-227-7525 (toll free)
ND Relay 1-800-366-6888
1674 15th St. West Unit E
Dickinson, ND 58601

Fargo

701-298-4459
888-342-4900 (toll free)
ND Relay 1-800-366-6888
2624 Ninth Avenue SW
Fargo, ND 58103-2350

Grand Forks

701-795-3100
888-256-6742 (toll free)
ND Relay 1-800-366-6888
151 S 4th Street Suite 401
Grand Forks, ND 58201-4735

Jamestown

701-253-6388
800-639-6292 (toll free)
ND Relay 1-800-366-6888
520 Third Street NW
PO Box 2055
Jamestown, ND 58402-2055

Minot

701-857-8642
888-470-6968 (toll free)
ND Relay 1-800-366-6888
1015 S Broadway Suite 18
Minot, ND 58701-4667

Williston

701-774-4662
800-231-7724 (toll free)
ND Relay 1-800-366-6888
316 Second Avenue W
PO Box 1266
Williston, ND 58802-1266

FINANCIAL AID

Bank of North Dakota (BND) College Planning Center

701-328-5835 or
800-554-2717
banknd.nd.gov

Student Financial Assistance Program

State Grant Program
North Dakota Scholars Program
701-328-2906
ndfinaid@ndus.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

Free Application for Federal Student Aid (FAFSA)

www.fafsa.ed.gov

See page 12 for more information or visit one of these websites:

Vocational Rehabilitation Offices: www.nd.gov/dhs/dvr/about/regional-contact.html

Human Service Centers: www.nd.gov/dhs/locations/regionalhsc

NORTH DAKOTA CTSO LEADERS



DECA prepares emerging leaders and entrepreneurs for careers in marketing, finance, hospitality and management in high schools and colleges around the globe.



FBLA brings business and education together in a positive working relationship through innovative leadership and career development programs.



FCCLA promotes personal growth and leadership development through Family and Consumer Sciences education.



FFA makes a positive difference in the lives of students by developing their potential for premier leadership, personal growth and career success through agricultural education.



SkillsUSA's mission is to empower its members to become world-class workers, leaders and responsible American citizens.



TSA fosters personal growth, leadership, and opportunities in Science, Technology, Engineering, and Mathematics (STEM).



Career and Technical Student Organizations (CTSOs)

CTSOs put your skills to the test, and help you learn, grow and compete. Join a student organization to:

- *Learn more about careers*
- *Develop leadership skills that will prepare you for college and career*
- *Test your skills at state and national competitions*
- *Participate in community service opportunities*



**North Dakota Department of
Career & Technical Education**
600 E Blvd Ave – Dept 270
Bismarck, ND 58505
Ph: 701-328-3180
Fax: 701-328-1255
cte@nd.gov • www.nd.gov/cte