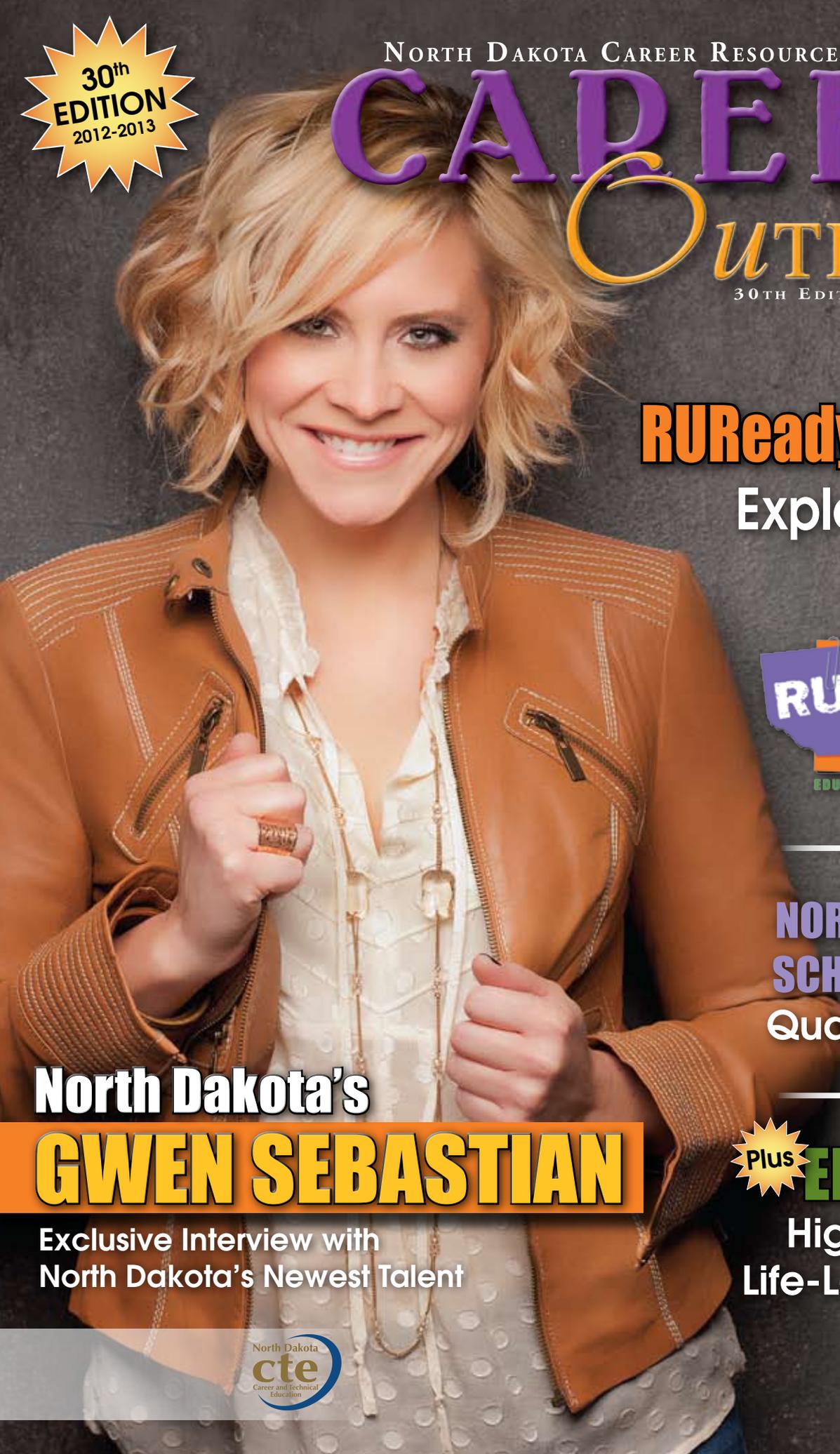


**30th
EDITION
2012-2013**

NORTH DAKOTA CAREER RESOURCE NETWORK

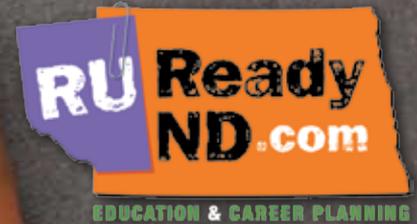
CAREER OUTLOOK

30TH EDITION • 2012-2013



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Achieve!



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SCHOLARSHIPS**
Qualify! Apply!

**North Dakota's
GWEN SEBASTIAN**

Exclusive Interview with
North Dakota's Newest Talent

Plus ENERGY!

High-Paying,
Life-Long Careers



ACKNOWLEDGEMENTS

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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Permission to Reprint:
Reference to the North Dakota Department of Career and Technical Education's Career Resource Network and the Career Outlook is requested.

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

Dear Students:

“What do you want to be when you grow up?”

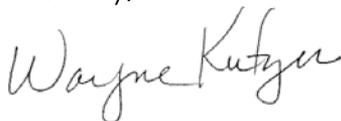
Chances are you have already heard that question more times than you care to recall. I challenge you to instead ask yourself, “What do I want to do next?” You are entering an exciting time in your life – filled with important decisions and vast and varied experiences. Now is the time to begin thinking about your future career. In order to be prepared to meet tomorrow, your planning should begin today.

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

There are so many career options to choose from that the decisions that need to be made may seem, at times, to be overwhelming. This magazine is your window to the resources available to you in our fine state of North Dakota. These resources will help guide you in the process of setting goals as well as planning and preparing for a lifetime of successful learning and earning.

I wish you the best as you continue to prepare yourself for that next step in your life.
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.

on the cover

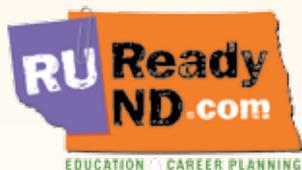
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Vocalist Shares her Story*



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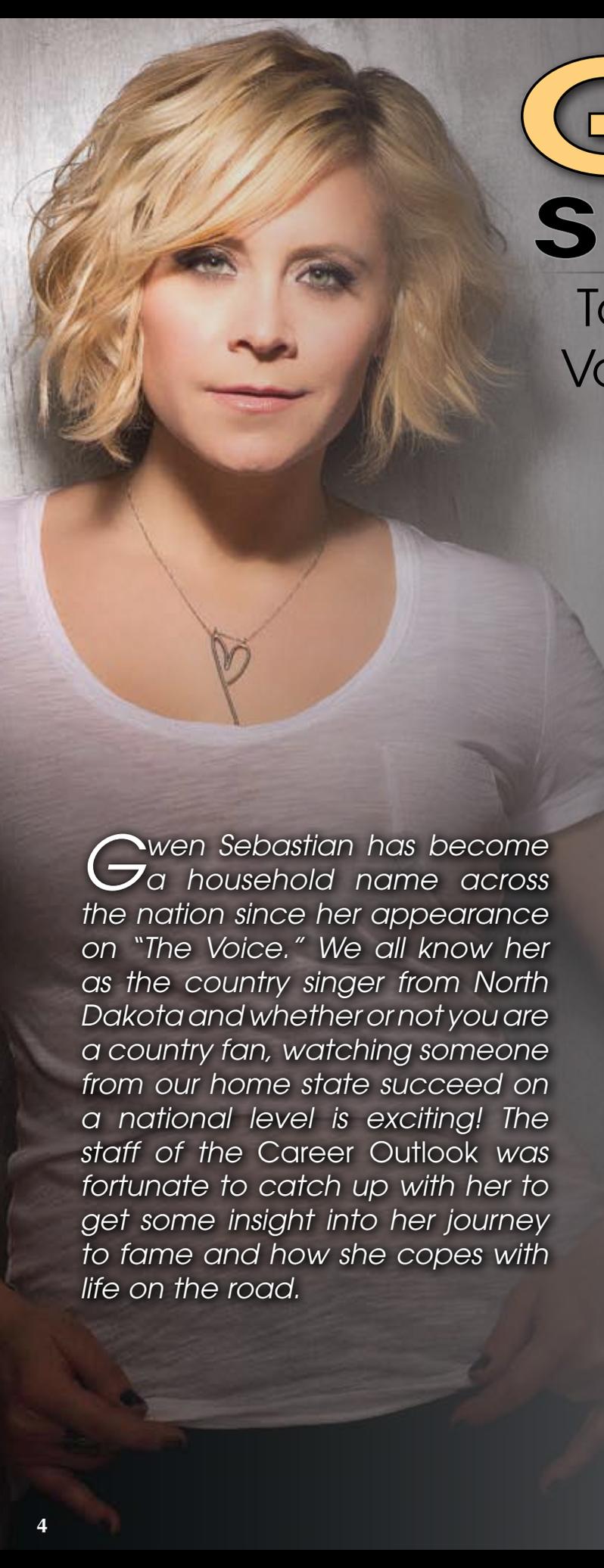


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A portrait of Gwen Sebastian, a young woman with blonde, wavy hair, wearing a white t-shirt and a necklace with a heart pendant. She is looking directly at the camera with a slight smile.

GWEN SEBASTIAN

Talented North Dakota Vocalist Shares Her Story

Gwen Sebastian has become a household name across the nation since her appearance on "The Voice." We all know her as the country singer from North Dakota and whether or not you are a country fan, watching someone from our home state succeed on a national level is exciting! The staff of the Career Outlook was fortunate to catch up with her to get some insight into her journey to fame and how she copes with life on the road.

Q: You grew up in Hebron, North Dakota. What early experiences did you have that led you to a singing career?

A: My parents were musicians and I grew up singing with them as much as I could. My family was also in the church choir and I was the church organist. I realize now, after the fact, that my experiences in extra-curricular activities, like speech and 4-H, have been helpful as well.

Q: Each time we see you on TV or read about you in a magazine or online, you talk about North Dakota. We don't always hear "stars" make reference to their home state. What endears you to North Dakota and drives you to return to both play and perform?

A: I've been blessed to be able to visit many different parts of the country, but there's nothing like North Dakota. The people here are the hardest working people, but along with that, they still make time for family and see the value in that. You can always depend on the people here to help each other out. I'm very proud to be a North Dakota girl.

Q: In high school, it is remembered that you showed the same enthusiasm for life then that you do now. It is part of what makes you uniquely Gwen! Tell us more about the "real" person that is Gwen Sebastian – family life, friends and quirky habits or superstitions.

A: When I have "down" time, I try to spend it with my family and friends. That's really important to me. This year has been the busiest it's ever been, and I haven't been able to do a lot of that, but in the end, it will be worth it. I think what makes being away from my family easier is that I get to travel and work with my boyfriend, Louis. That's been a blessing. We get to make music together! As for habits, well.....I LOVE to eat. Everything. Doesn't matter really what it is, I'll try it. I love going to local places on the road and see what's in store. I do love to cook, and when I have time to do it, it's usually comfort food like mashed potatoes and meatloaf. Yummy!!!! Luckily, I also enjoy exercising. Well, maybe not enjoy the actual activity, but it feels good when I'm done. I run a lot or bring along my P90X videos to work off the brownies!

Q: Before you started this journey, you had another career plan. Tell us about that – where you went to school, your major and how you made the switch from one to the other.

A: I knew as a kid that I always wanted to sing, but, I thought I needed a “back-up plan.” I went to NDSU for several years, then to Medcenter One College of Nursing...for one semester and decided it was time to make the move to Nashville. It was mentioned that if the music thing didn’t work out, I always had a spot to come back. I wonder if that still stands. Hee hee!

Q: “The Voice!” All of North Dakota enjoyed your appearance in the TV show, “The Voice.” Any idea what their deciding factor was when they picked you to be on the show? What was the most exciting part of the show for you?

A: It still is the most amazing opportunity that I’ve been given. While it is based on “the voice,” I think that my story of growing up in a rural community and making the big move to Nashville was part of the reason they gave me a chance. I am grateful that I was able to have that chance to sing in front of four incredible artists and meet so many peers who have the same dream as me. We all became a little family in a very short period of time. I still keep in touch with some of my friends I made on the show. Still to this day, the blind audition was the most nerve racking performance I’ve ever had, but, it was worth it!

Q: Your latest single “Met Him in a Motel Room” is a very heartfelt song. What led you to write this message? Is most of your music inspired by personal experiences?

A: Well, I wish I could say that I wrote this song, but it was actually written by Jamie Teachenor and Rory Feek of the duo Joey and Rory. I love to write, whether it be by myself or with a co-writer and I get inspiration from everyday life, whether it be my own or someone else’s. People will ask, “Why didn’t you record a song you wrote?” and I always say, “The best song wins.” In this case of “Met Him in a Motel Room,” that’s what happened. I heard it and was completely drawn in, by the melody and especially by the title. It sounds like it could be about something completely different and you realize that it’s a song of hope found in a time and place you might not think you’ll find it. I was moved by its message and hopefully it will do the same to more listeners.



Gwen and her band performing in Rugby (left) and in Hazen (above) during this year’s North Dakota Tour.



Q: While Blake Shelton didn’t choose you as a final “best” on “The Voice,” he obviously saw your talent by including you in his tour. How did that happen and can you tell us a bit about that experience?

A: I knew my “Voice fate” in December 2011, even though the show didn’t actually air until February 2012. Two days after I was eliminated during the battle rounds of the show, Blake contacted me and asked if I’d like to come out and sing back up with him for a few months. At first, I thought, yeah right, you’re kidding...but, thank goodness he wasn’t! I’ve been part of Blake’s crew since January 2012 and he has now asked me to stay and sing with him as much as I can while allowing me to continue pursuing my own career. Not only is he talented, he’s one of the most down to earth, funny and kind hearted guys I have ever met. I am very thankful he and Miranda are a part of my life and will be forever grateful to them.

Q: What is your plan for the future?

A: I am currently touring on my own, along with doing shows with Blake Shelton, and in-between, visiting as many radio stations as I possibly can. I am also excited to be recording a new CD and hopefully a video very soon. As for the extended future, I hope to be able to headline my own tour, have children, make a mission trip with World Vision and help new and upcoming artists.

Q: Thanks so much for your willingness to share of yourself to answer these questions for the *Career Outlook*. Do you have any last words of advice for North Dakota students as they plan for their future in North Dakota?

A: I believe that no matter where you live or where you come from, that it’s important to never settle. If you are not happy in what you are doing, then change it, even if it’s something small in your daily life. I am proud to have been part of the North Dakota education system and what I learned has been extremely valuable. Growing up in North Dakota and going to school here has made me who I am and has taught me how important hard work and perseverance is. In order to follow my dreams, my career choice led me to move away from North Dakota, but that doesn’t mean I’ve forgotten where I’ve come from, and like many of us who grew up here, it will always be...home.



Photo by Chris Hollo

Pictured L to R: Pete Fisher, VP and general manager Grand Ole Opry, Flying Island’s Gwen Sebastian, and Little Jimmy Dickens.

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:

- Knowing when and how to discuss your disability with an instructor or employer.
- Determining what questions are appropriate on an application or during an interview.
- Knowing what your rights are under the Americans with Disabilities Act (ADA) or Section 504 of the Rehabilitation Act.
- Determining 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 find 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.
- By assisting with services you need that are not provided by the institution (i.e., personal aids and assistive technology devices).
- By 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 please visit their website at

www.nd.gov/dhs/dvr

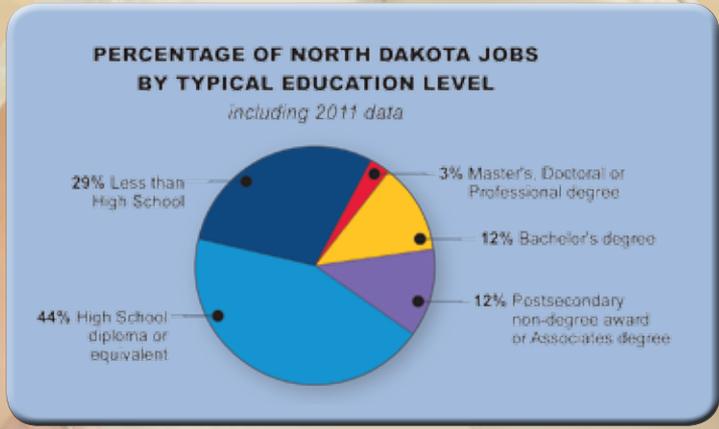


Refer to page 63 (resources page) for contact information and locations of the eight Vocational Rehabilitation regional offices.

JOB SERVICE North Dakota



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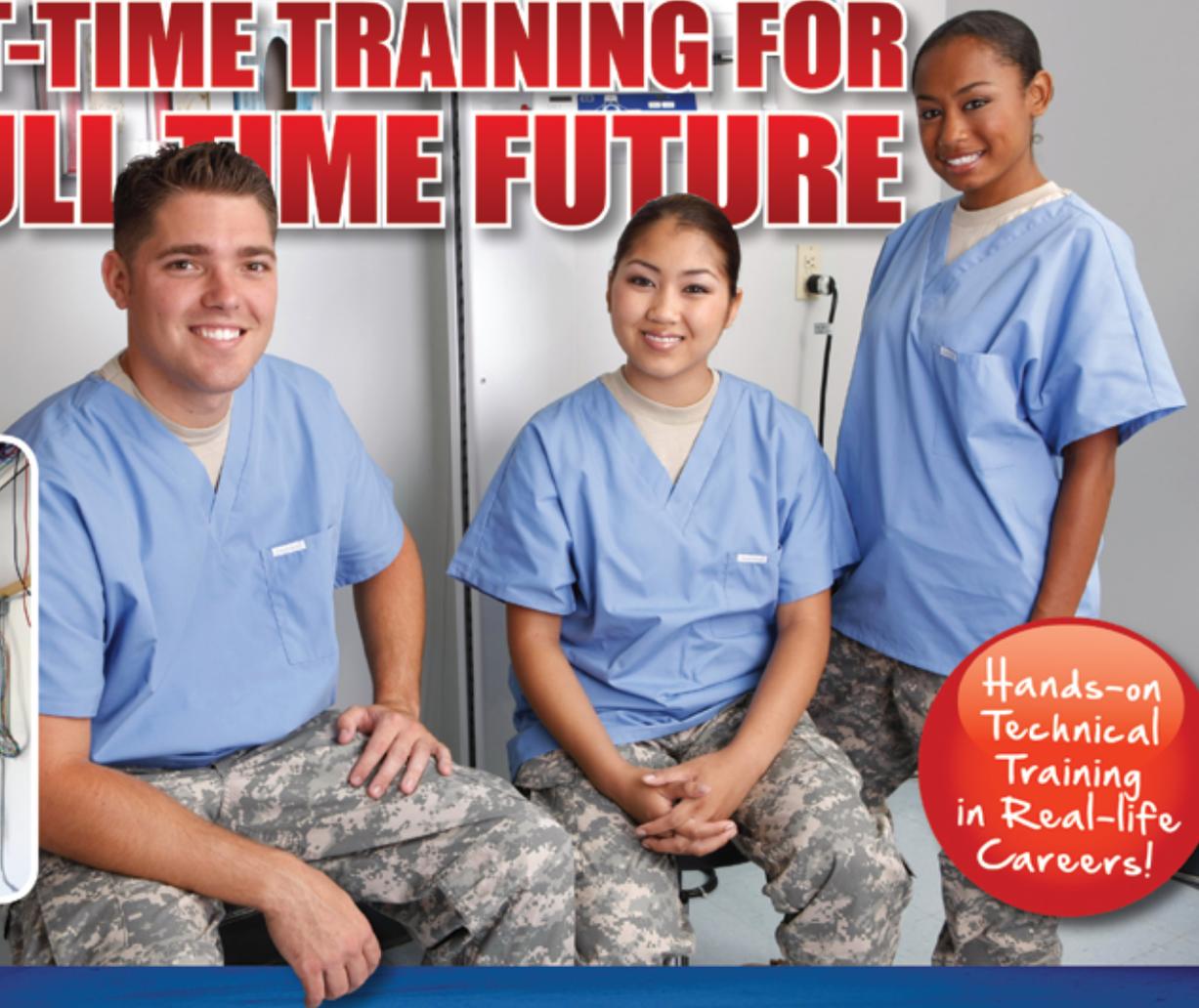


(click)

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.

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

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Careers!

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- Interior Electrician
- Concrete/Asphalt Equipment Operator
- Carpentry/Masonry Specialist
- Avionics Mechanic
- Air Traffic Control Operator
- Information Technology Specialist

- Cable Systems Installer/Maintainer
- Paralegal Specialist
- Military Police
- Human Resources Specialist
- Public Affairs Broadcast Journalist
- Dental Specialist
- Patient Admin Specialist
- Radiology Specialist
- Health Care Specialist
- Mental Health Specialist

- Motor Transport Operator (Truck Driver)
- Wheeled Vehicle Mechanic
- Power Generator Equipment Repairer
- Machinist/Metal Worker
- Construction Equipment Repairer
- Food Service Specialist (Cook)
- **Many more!**





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.

LEARN ABOUT THE MILITARY

**What careers and jobs are available?
What are the enlistment benefits?
How do you join?**

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www.airforce.com
Bismarck • 701-258-5163
Fargo • 701-277-1818
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AIR NATIONAL GUARD

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1-800-972-8825

ARMY NATIONAL GUARD

NDGUARD.com
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(1-888-634-8273)
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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
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ASVAB CAREER EXPLORATION PROGRAM

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UNITED STATES COAST GUARD ACADEMY

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UNITED STATES AIR FORCE ACADEMY

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Colorado Springs, CO
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UNITED STATES MERCHANT MARINE ACADEMY

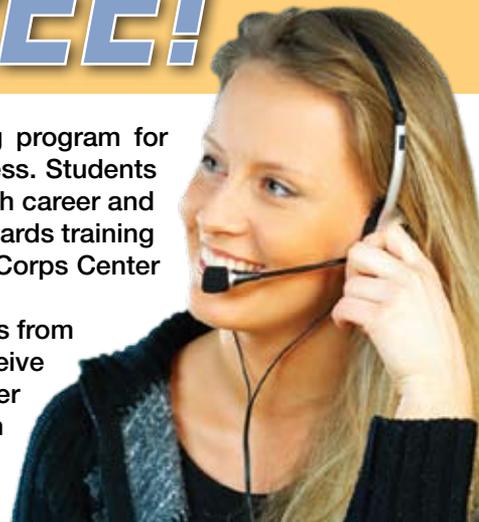
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Kings Point, NY
1-516-726-5800

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. Job Corps has 50 years of success. 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 250 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. So start on the path to your career today. Check out our technical training options below, or find us on the web at quentinnburdick.jobcorps.gov.



Career and Technical Training

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

Academic Training

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

Single Parent Program

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

For More Information

For more information, 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, or visit quentinnburdick.jobcorps.gov.

ADULT EDUCATION...gives YOU a second chance!

Adult Education promotes and supports free 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 classes provide a second opportunity for adult learners committed to improving their academic and life skills.



Each Adult Learning Center provides instruction to...

- master basic educational skills in reading, math, computer literacy, science, social studies and language/writing;
- English skills and citizenship preparation;
- prepare for and take the GED exam; and
- workplace and career readiness skills/instruction.

GED ... get it now!

The GED is now available via computer. Take the GED by computer and receive instant results! According to the US Census, individuals who receive a GED will earn \$9,671 more annually than those who do not. 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!



Visit www.dpi.state.nd.us/adulted for more information.
See page 62 for ALCs in your area.

North Dakota Academic and Career and Technical Education Scholarship Programs

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

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

To establish eligibility, North Dakota seniors must apply by June 7. Students who are awarded a scholarship may defer acceptance of the scholarship. However, recipients have up to six years following high school graduation to utilize the scholarship award. Students will need to select their high school coursework carefully in order to meet all the 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 701-328-2755 or 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 the WorkKeys assessments (CTE Scholarship only)

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Call your state apprenticeship office at 701-250-4700 or visit www.ndapprenticeship.com to learn more about apprenticeship.

RU Ready ND.com

EDUCATION & CAREER PLANNING

Explore career and education opportunities, Plan your strategy to achieve them, Advance your possibilities at RUReadyND.com.

Middle School

- ◆ Learn about yourself
- ◆ Explore careers and possibilities
- ◆ Explore education programs
- ◆ Learn about scholarships
- ◆ Set goals and strategies to achieve them
- ◆ Start your high school plan
- ◆ Check out timelines to help with your planning
- ◆ Save all your work in your lifelong portfolio

High School

- ◆ Explore career options based on your interests
- ◆ Plan and keep track of your classes, grades and community service
- ◆ Prepare for the ACT with testGEAR®
- ◆ Explore colleges and universities
- ◆ Use college and financial aid planning timelines
- ◆ Search for scholarships
- ◆ Set goals for your career and college plans
- ◆ Save all your work in your lifelong portfolio

Parents

- ◆ Review the planning timelines to make sure your student is on track
- ◆ Assist your student in finding scholarships
- ◆ View your student's high school course plan to help them accomplish their goals



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

Adults

- ◆ Expand upon your career and college plans
- ◆ Create your resumes and cover letters with online advice and assistance
- ◆ Find interview and practice questions
- ◆ Search for scholarships
- ◆ Research multiple post-secondary opportunities for colleges nationwide
- ◆ Save all your work in your lifelong portfolio



Not sure where to start?
Go to RUReadyND.com for
more information. Use the
Guideways to walk through
the steps or call 701-328-
9733. Check us out!



Reality Check

As you start dreaming about your future life and career, you'll need to consider what it will cost to live on your own. The estimated living expenses below show you the basic costs for a 22-year-old living in the United States. Using these figures or those you have adjusted to fit your lifestyle and expenses more accurately, estimate the amount of money you will need to earn each month. Then, look at the occupations in the Occupational Section (pages 19-52) to find occupations that pay enough to meet your basic living expenses and the amount needed for taxes, retirement and insurance.*

Source: 2008 Expenditure Survey, United States
Department of Labor/Bureau of Labor Statistics adjusted
for 2010 based on the Consumer Price Index Inflation
Calculator (www.bls.gov/bls/inflation.htm)



*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](http://www.jumpstart.org/reality-check.html)

Youth FORWARD
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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.

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



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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 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, 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>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.</p> | <p>Park Rangers, Wildlife Biologists, Foresters, Farm Managers</p> | <p>3,340 ↘ 26,735/521 ↘ \$68,730-84,560</p> | <p>Realistic HS HW</p> | <p>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.</p> |
| <p>Farmworkers Plant, cultivate, spray, irrigate, and harvest crops. Care for animals and poultry. Operate farm machinery. Prepare crops for marketing. Repair farm buildings and fences.</p> | <p>Groundskeepers, Park Rangers, Wildlife Technicians, Farmers</p> | <p>285,750 ↘ 4,197/133 → \$19,970-27,360</p> | <p>Realistic</p> | <p>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.</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.

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);
Stable → (0-1.9% per year); and
Faster than average ↗ (2-3.5% per year);
Declining in employment ↘ (Less than 0% per year).

ND Earnings is a range of salaries for those employed in the occupation in the State. Some salaries will have a "US" at the end, which indicates North Dakota salaries were not available, so a national average was used. **The salaries shown reflect a 40-hour work week for many occupations. Be aware it is possible to earn a considerably higher salary in those occupations where overtime wages are paid.**

4 Holland Type

Artistic: Artistic occupations frequently involve working with forms, designs and patterns. They often require self-expression, and the work can be done without following a clear set of rules.

Conventional: Conventional occupations frequently involve following set procedure and routines. These occupations can include working with data and details more than ideas. Usually there is a clear line of authority to follow.

Enterprising: Enterprising occupations frequently involve starting and carrying out projects. These occupations can involve leading people and making decisions. Sometime they require risk taking and often deal with business.

Investigative: Investigative occupations frequently involve working with ideas and require an extensive amount of thinking. These occupations can involve searching for the facts and figuring out problems mentally.

Realistic: Realistic occupations frequently involve work activities that include practical, hands-on problems and solutions. They often deal with plants, animals and real-world materials like wood, tools and machinery. Many of the occupations require working outside and do not involve a lot of paperwork or working closely with others.

Social: Social occupations frequently involve working with, communicating with, and teaching people. These occupations often involve helping or providing service to others.

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 2010-2020 North Dakota Employment Projections, 2012 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 and Statistics. Wages and employment numbers were updated using the 2012 Edition of the Wages for North Dakota Jobs and North Dakota Employment and Wages which is updated annually by Job Service North Dakota. When current figures are not included in these publications, every effort is made to reach out to professionals in the field to obtain current and relevant data.

Occupational Section Index

| | | | | | | | |
|--|----|--|----|--|----|--|----|
| Accountants and Auditors | 27 | Detectives and Criminal Investigators (M)..... | 43 | Insurance Sales Agents | 32 | Printing Press Operators (M) | 24 |
| Administrative Service Managers (M)..... | 26 | Diesel Mechanics/Bus and Truck Mechanics (M) | 51 | Interior Designers | 47 | Process Plant Operator (Chemical Plant and System Operators) | 44 |
| Agricultural and Food Science Technicians | 38 | Dietetic Technicians | 34 | Janitors and Cleaners | 26 | Property and Real Estate Managers..... | 46 |
| Agricultural Inspectors (M)..... | 20 | Dietitians and Nutritionists (M) | 35 | Land Surveyors (M) | 23 | Psychologists (M) | 39 |
| Air Traffic Control Specialists (M) | 51 | Dispatchers (M) | 43 | Landscaping and Groundskeeping Workers | 19 | Public Relations and Fundraising Managers..... | 27 |
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| Bus Drivers (M)..... | 51 | Engineers, Energy | 48 | Medical and Clinical Laboratory Technologists (M) | 36 | Sales Representatives..... | 47 |
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| | | Engineers, Physics Applications | 49 | Medical Records and Health Information Technicians (M) | 34 | Salespersons, Retail Trade | 47 |
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| Carpenters (M)..... | 22 | Executive Secretaries and Administrative Assistants (M) | 26 | Meteorologists (M) | 49 | Secretaries, Except Legal, Medical and Executive..... | 26 |
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| Clerks, Shipping and Receiving (M)..... | 26 | Forest and Conservation Technicians..... | 19 | Operating Engineers/Construction Equipment Operators (M) | 22 | Stationary Engineers (M)..... | 23 |
| Clerks, Stock (M)..... | 46 | Funeral Service Directors, Morticians and Undertakers | 46 | Optometrists (M)..... | 36 | Structural Metal Workers | 23 |
| Computer and Information Systems Managers..... | 41 | | | Personal and Home Care Aides | 39 | Surgical Technologists (M)..... | 35 |
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| Computer Operators (M)..... | 41 | Grain Elevator Superintendents | 19 | Pharmacy Technicians (M)..... | 35 | System Operator (Power Distributors and Dispatchers) | 19 |
| Computer Programmers (M)..... | 41 | Graphic Designers (M) | 24 | Photographers (M)..... | 24 | Teacher Assistants | 29 |
| Computer Support Specialist (M)..... | 41 | Health Services Managers (M)..... | 35 | Physical Therapists (M)..... | 36 | Teachers, Career and Technical Education Secondary School..... | 29 |
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| Conservation Scientists | 20 | Heating and Air Conditioning Mechanics (M) | 22 | Physician Assistants (M)..... | 36 | Teachers, Secondary..... | 29 |
| Construction Laborers | 22 | Heavy Equipment Mechanics (M) | 51 | Physicians (M) | 36 | Teachers, Special Education | 29 |
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| Counselors, Rehabilitation..... | 39 | Information Security Analysts..... | 41 | Preschool Teachers: Except Special Ed..... | 29 | Veterinary Technicians and Technologists | 35 |
| Customer Service Representatives | 26 | Inspectors and Compliance Officers except Construction and Agriculture (M) | 33 | | | Waiters and Waitresses | 38 |
| | | Instructors, Sports {Coaches} (M) .. | 38 | | | Water Treatment Plant Operators (M) | 20 |
| | | | | | | Welders and Cutters (M) | 44 |
| | | | | | | Writers and Editors (M) | 24 |

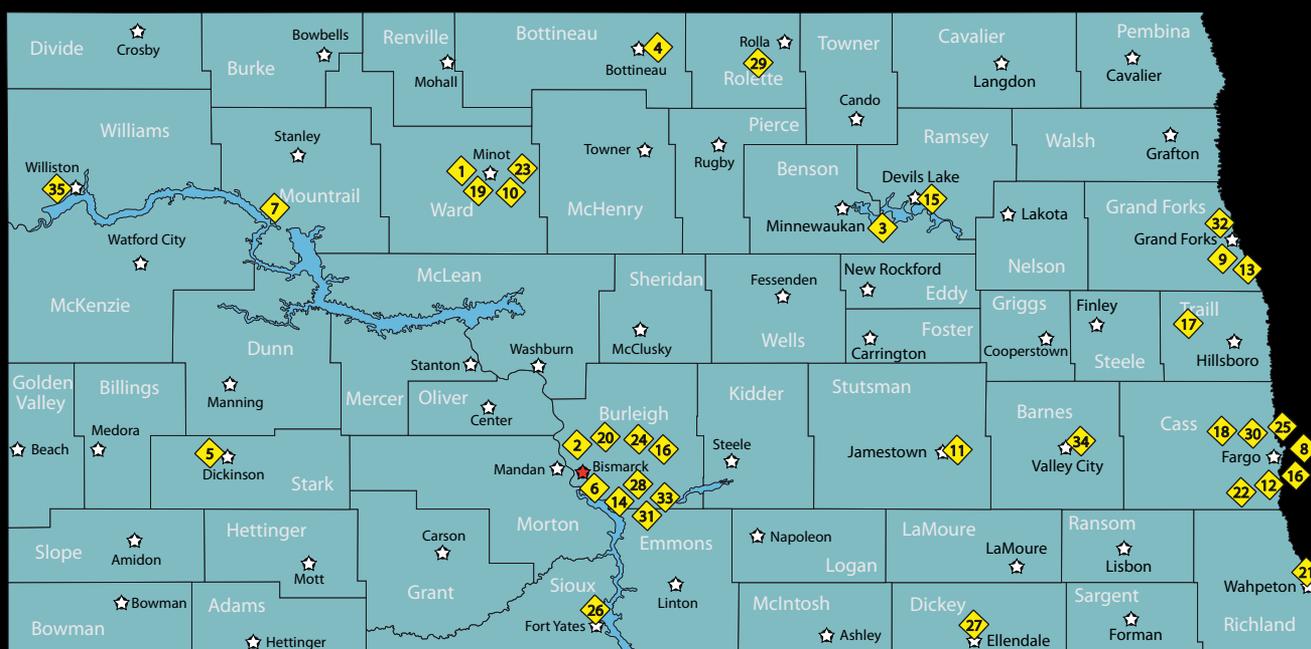
North Dakota Postsecondary Education/ Training Programs

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 | GKFCS | GFK Flight Support |
| 10 | HAHD | Headquarters Academy of Hair Design |
| 11 | JC | Jamestown College |
| 12 | JSHDF | Joseph's School of Hair Design Fargo |
| 13 | JSHDGF | Joseph's School of Hair Design Grand Forks |
| 14 | JZT | JZ Trend Academy |
| 15 | LRSC | Lake Region State College |
| 16 | LW | Lynnes Welding |
| | MIL | Military |
| 17 | MaSU | Mayville State University |

| | | |
|----|--------------|---------------------------------------|
| 18 | MBC | Moler Barber College |
| 19 | MISU | Minot State University |
| 20 | MOCN | Medcenter One College of Nursing |
| 21 | NDSCS | North Dakota State College of Science |
| 22 | NDSU | North Dakota State University |
| 23 | PAR | Pietsch Aircraft and Restoration |
| 24 | RCB | Rasmussen College Bismarck |
| 25 | RCF | Rasmussen College Fargo |
| 26 | SBC | Sitting Bull College |
| 27 | TBC | Trinity Bible College |
| 28 | THA | The Hair Academy |
| 29 | TMCC | Turtle Mountain Community College |
| 30 | TSPA | The Salon Professional Academy |
| 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 |

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 | | | | |
| 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 | 3,340 ↘ 26,735/521 ↘ \$68,730-84,560 | 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 marketing. Repair farm buildings and fences. | Groundskeepers, Park Rangers, Wildlife Technicians, Farmers | 285,750 ↘ 4,197/133 → \$19,970-27,360 | 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 | 30,620 ↘ 209/9 → \$29,920-44,980 | Realistic HS | Most employers require career and technical education training. Must like working outdoors. Hired by the federal, state, or local government. |
| Grain Elevator Superintendents Coordinate and supervise workers in loading, storing, unloading, cleaning, and blending grains for milling and shipment. Inspect grain. | Purchasing Agents, Grain Buyers | 10,180 → 363/11 → \$44,180-70,490 | Enterprising HS HW | Most superintendents have fifteen or more years of experience in elevator work as assistants or laborers before becoming superintendents. Wages vary depending upon size and location of elevator and whether it is privately owned or a cooperative. |
| 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 | 821,750 ↗ 2,615/93 → \$17,140-27,210 | 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. |
| Livestock Sales Representatives Sell cattle, horses, hogs, and other livestock to packing houses, farmers, or other purchasers. Review current market and inspect livestock to determine value. | Grain Buyers, Real Estate Agents, Insurance Agents, Buying and Purchasing Agents: Farm Products | 10,180 → 363/11 → \$44,180-70,490 | Enterprising HS HW | Training ranges from a high school diploma to a bachelor's degree. Experience working with cattle and knowledge of various breeds necessary. Good communication skills essential. |
| Nuclear Operator (non-licensed) Service and calibrate radiation protection instruments and equipment, monitor plant performance, measures and records plant chemistry and radioactivity levels, and operates chemical and radiochemical instrumentation and equipment. | Maintenance Technicians, Chemistry Technicians, Health Physics Technicians | 6,240 → NA/NA \$55,980-101,730 US | 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. |
| Nursery and Greenhouse Managers Plan, organize, direct, control, and coordinate activities of workers engaged in propagating, cultivating, and harvesting horticultural specialties, such as trees, shrubs, flowers, mushrooms, and other plants. | Forestry Technicians, Lawn Service Workers, Groundskeepers | 100,460 → 391/10 → \$28,630-49,560 | Enterprising HS HW | Training is available on the job or through a career and technical education program. Knowledge of horticulture important. Must like working outdoors. |
| Power Plant Operators (M) Control, operate or maintain machinery to generate electrical power. | Boiler Operators, Stationary Engineers, Water Treatment Plant Operators | 39,980 ↘ 380/17 → \$62,910-72,970 | 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. |
| 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 | 51,540 → 1,227/188 ↑ \$29,900-45,560 | 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. |
| System Operator (Power Distributors and Dispatchers) Control the flow of power on the grid, ensure safe and reliable power is delivered to customers. | Transmission Operators, Transmission System Operators, Generation Coordinators | 11,600 ↘ NA/NA \$48,210-96,840 US | 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. |

AGRICULTURE, FOOD & NATURAL RESOURCES

| Occupational Title/Description | Related Occupations | Nat'l Employment ND Employment/ Proj. Openings ND Earnings | Holland Type Rating | Hiring Practices |
|---|--|---|------------------------------|--|
| Water Treatment Plant Operators (M) Operate or control an entire process or system of machines, often through control boards, to transfer or treat water or liquid waste. | Boiler Operators, Powerplant Operators, Stationary Engineers | 109,190 → 462/19 → \$22,510-44,200 | 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 | 13,780 → 97/5 → \$25,920-36,980 | 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. |
| Biologists and Zoologists (M) Conduct research to gain information about the origin, development, anatomy, and other basic principles of plant and animal life. May specialize in one aspect of biology, such as embryology, botany, microbiology, wildlife, etc. | Environmental Scientists, Foresters, Range Managers, Soil Scientists | 18,380 → 95/2 ↓ \$45,520-66,030 | 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. |
| 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 | 18,910 → 223/3 ↓ \$41,430-73,580 | 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. |
| Scientists, Animal Conduct research in selection, breeding, feeding, management and marketing of beef, horses, and other animals. Develop improved practices in feeding, housing, sanitation, and disease control. Control breeding practices to improve strains of animals. | Soil Scientists, Biochemists, Environmental Scientists, Animal Health Technologists | 2,190 → NA/NA \$34,990-127,600 US | Investigative HS HW | A bachelor's degree is required; a master's or doctorate for advancement and administrative positions. Ability to work independently and communicate effectively essential. May be hired by private or government sector. |
| Soil and Plant Scientists Conduct research in breeding, physiology, production, yield, and management of crops and agricultural plants, their growth and control of pests or study the chemical, physical, biological, and mineralogical composition of soils. | Biochemists, Life Scientists, Foresters, Plant Physiologists, Environmental Scientists | 11,860 → 117/8 ↑ \$36,980-66,050 | 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. |

BJCC BSC CCCC DCB DSU EATC FBCC FFS GFKFS HAHD JC JSHDF JSHDGF JZT LRSC LW MIL MaSU MBC MBSU MOCN NDSCS NDSU PAR RCB RCF SBC TBC THA TMCC TSPA UM UND UTTC VCSU WSC

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

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 | | | | |
| Bricklayers and Stonemasons (M) Lay bricks, stone, concrete and set cinder blocks to build and repair walls, boilers, furnaces, and other structures. Use chisels, hammers, trowels, levels, and other tools. | Cement Masons, Plasterers, Tilesetters | 62,560 ↑ 234/14 ↗ \$41,680-56,910 | 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 | 578,910 ↗ 3,603/154 ↗ \$25,320-39,930 | 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. |
| 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. | Carpenters, Brick Masons | 779,370 ↗ 2,956/97 ↗ \$23,960-35,000 | Realistic ☀️ | For some construction laborer jobs, employers hire people without experience or specific training. However, the work requires more strength and stamina than most occupations. |
| Construction Managers Plan, organize, direct, and coordinate through subordinate personnel activities concerned with erection, alteration, maintenance, and repair of structures, facilities, and systems such as houses, office buildings, bridges, roads, and similar structures. | Construction and Building Inspectors, Civil Engineers, Architects | 195,000 → 951/24 → \$52,270-94,760 | 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 (M) Prepare drawings from designers' sketches and specifications for purposes such as manufacture and installation of machinery and equipment or for construction of buildings, dams, bridges, roads, and other projects. Prepare maps and charts. | Architects, Engineering Technicians, Landscape Architects | 177,840 → 521/20 → \$29,746-49,266 | 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 | 75,520 ↗ 252/12 ↗ \$25,520-38,190 | Realistic ☀️ | Employers seek applicants who have completed apprenticeship training or have experience. Some may train on the job. This occupation is dependent on the construction industry and may be seasonal. Employers look for experienced workers. May be self-employed. |
| Electric Utility Worker (Electrical Power-Line Installers and Repairers) (M) Inspect, operate and repair electrical equipment in substations, in-service relays, and with distribution systems. | Transmission Designers, Lineworkers, Relay Apparatus Technicians, Substation Electrician Technicians, System Protection Technicians, Substation Operators, Metering Technicians | 105,570 → 747/39 → \$36,930-65,480 | 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. |
| 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 | 512,290 ↗ 2,103/97 → \$33,980-55,330 | 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. |
| 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 | 47,530 → 492/27 ↗ \$33,090-53,980 | 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 | 231,160 ↗ 491/23 ↗ \$33,440-47,560 | 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. |
| Operating Engineers/Construction Equipment Operators (M) Operate construction equipment, such as graders, bulldozers, scrapers, pumps, derricks and front-end loaders. | Mining Machine Operators, Truck Drivers | 335,410 ↗ 2,241/115 ↗ \$37,750-55,440 | 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. |

ARCHITECTURE & CONSTRUCTION

| Occupational Title/Description | Related Occupations | Nat'l Employment ND Employment/ Proj. Openings ND Earnings | Holland Type Rating | Hiring Practices |
|---|--|---|------------------------------|---|
| Plumbers and Pipefitters (M) Build and repair water, waste disposal, and gas systems in homes and other buildings. Install plumbing fixtures, appliances, and heating and cooling systems. Use hand and power tools. | Heating and Air Conditioning Mechanics, Carpenters | 349,320 ↗ 1,166/61 ↗ \$35,050-56,250 | Realistic HS HW ☀️ | Many employers require either past experience or formal apprenticeship training. Hired by construction companies. May be self-employed. License required. |
| Sheet Metal Workers (M) Fabricate, assemble, install and repair sheet metal products and equipment, such as ducts, drainpipes and furnace casings. | Heating and Air Conditioning Mechanics, Iron Workers | 130,670 → 698/25 → \$27,720-44,310 | Realistic HS ☀️ | Employers prefer applicants who have completed an apprenticeship or career and technical education training. Should have above average ability to visualize objects of 2 or 3 dimensions and mechanical ability. Hired by air conditioning and heating contractors. |
| Stationary Engineers (M) Operate and maintain stationary engines and mechanical equipment such as steam engines, air compressors, generator turbines, and steam boilers that provide power for heating, cooling, and ventilation in factories and buildings. | Power Station Operators, Refinery Operators, Water Treatment Plant Operators | 34,580 → 107/3 → \$35,240-51,810 | Realistic HS HW | Employers prefer applicants from formal career and technical education or apprenticeship programs. May receive training on the job and move up to stationary engineers from boiler operating position. Hired by factories, hospitals, schools, and power stations. |
| Structural Metal Workers Raise, place and unite iron or steel girders, columns and other structural members to form structures or structural frameworks. | Form Builders, Carpenters, Welders | 56,920 ↗ 268/10 → \$27,280-44,380 | Realistic HS | Employers prefer applicants with formal apprenticeship training. Some may train on the job. Most work outside in all kinds of weather. Hired by general contractors, steel erection contractors, and ornamental iron contractors. |
| Postsecondary Programs – Bachelors Degree or More | | | | |
| Architects (M) Design buildings, develop plans, specifications and detailed drawings. Prepare scale and full size drawings. Arrange contracts and exercise supervision over construction. Consult with engineers and other specialists. | Mechanical Engineers, Architectural Drafters, Landscape Architects | 83,590 ↗ 155/8 ↗ \$36,030-73,520 | Artistic HS HW ☀️ | Graduation from a five-year program in architecture is the minimum requirement for employment. Job availability depends on the construction industry. Must be creative, artistic, perceptive, and be able to work independently. Must be licensed. |
| Architects, Landscape Design housing areas, public parks, shopping centers, etc., so that areas are useful and beautiful. Plan location of buildings, roads, walks, and arrangement of vegetation and open space. Prepare site plans, specifications and cost estimates. | Landscape Drafters, Architects, Golf Course Designers | 15,760 → NA/NA \$41,870-46,730 | Artistic HS HW | Graduation from five-year program is the minimum requirement. Must be creative and have artistic talent. This occupation is dependent upon the construction industry. Must be able to work independently. |
| Cost Estimators Prepare cost estimates for product manufacturing, construction projects or services to aid management in bidding or determining price of product or service. | Construction Managers, Architectural Drafters | 187,730 ↗ 548/32 ↗ \$36,860-59,230 | Conventional HS HW ☀️ | Over half work in the construction industry. Job prospects should be best for those with industry work experience and a bachelor's degree in a related field. |
| Land Surveyors (M) Make exact measurements and determine property boundaries. Provide data relevant to shape, contour, gravitation, location, elevation, or dimension of land or land features. | GIS Specialists, Geologists, Civil Engineers, Engineering Technicians | 42,020 ↗ 274/17 ↗ \$33,950-56,500 | Investigative HS HW ☀️ | Training may range from an associate's to bachelor's degree. Must be able to visualize and understand objects, distances, sizes and other abstract forms. Must be accurate and quick with mathematical calculations. |

BJCC BSC CCCC DCB DSU EATC FBCC FFS GFKFS HAHD JC JSHDF JSHDGF JZT LRSC LW MIL MaSU MBC MSU MOCN NDSCS NDSU PAR RCB RCF SBC TBC THA TMCC TSPA UM UND UTTC VCSU WSC

| ARCHITECTURE & CONSTRUCTION | | | | | | | | | | | | | | | | | | | | |
|--|--|------|-----|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|-----|
| ARCHITECTURE | | | | | | | | | | | | | | | | | | | | |
| Architecture | | | | | | | | | | | | | | | | | | | | 6 |
| Construction Engineering | | | | | | | | | | | | | | | | | | | | 4 |
| Construction Management | | | | | | | | | | | | | | | | | | | | 4 |
| Construction Management Technology | | | | | | | | | | | | | | | | | | | | 2 |
| Environmental Design | | | | | | | | | | | | | | | | | | | | 4 |
| Landscape Architecture | | | | | | | | | | | | | | | | | | | | 4 |
| Sustainable Construction Technology | | 1-2* | | | | | | | | | | | | | | | | | | |
| CONSTRUCTION | | | | | | | | | | | | | | | | | | | | |
| Architectural Drafting & Estimating Technology | | | | | | | | | | | | | | | | | | | | 2 |
| Building Construction Technology | | 1-2 | | | | | | | | | | | | | | | | | | 2 |
| Building Maintenance | | | | | | | | | | | | | | | | | | | | 1-2 |
| Carpentry, Residential | | 1 | 1-2 | 1 | | | | | | | | | | | | | | | | 2 |
| Heating, Ventilation and Air Conditioning | | | 1-2 | | | | | | | | | | | | | | | | | 1-2 |
| Lineworker, Electrical | | | 1-2 | | | | | | | | | | | | | | | | | |
| Mechanical Systems | | | | | | | | | | | | | | | | | | | | 2 |
| Plumbing | | 1-2 | | | | | | | | | | | | | | | | | | 1 |

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 Technologists | 30,360 → 173/5 ↓ \$19,640-46,430 | Realistic HS HW | 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 | 106,560 → NA/NA \$18,580-28,380 | 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 | 54,410 → 201/3 → \$17,110-33,620 | 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 Occupations (M) Skills include paste-up, electronic page layout, camera operation, typesetting, and platemaking. Workers may specialize in one skill, but most employers require skills in all areas. | Graphic Designer, Computer Operators, Printing Press Operators | 43,430 ↓ 146/3 ↓ \$20,250-34,320 | 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 | 179,220 ↓ 383/8 ↓ \$20,930-36,270 | Realistic | Mechanical aptitude is important in making machine adjustments. Ability to visualize color is essential for work on color presses. |
| Radio and Television Announcers (M) Introduce various types of programs. Interview guests. Act as a master of ceremonies. Read news bulletins and make other announcements. Broadcast weather, traffic conditions, and other information. | Sportscasters, Narrators, Disc Jockeys | 31,680 → 325/9 ↓ \$17,480-32,170 | 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 | 148,930 → 325/9 → \$35,760-61,540 | 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 Illustrators | 191,550 → 559/24 → \$24,010-39,490 | 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 | 145,710 → 444/15 → \$31,250-51,810 | Artistic HS HW | Increasing numbers of employers require a master's degree for entry into this occupation. Must be able to present ideas and information clearly and communicate with people. Computer literacy important. |
| News Analysts, Reporters and Correspondents (M) Collect and analyze facts about newsworthy events. Conduct interviews and investigations. Write newspaper, magazine, and television stories. Refer stories to the publication or broadcasting editor for approval. | Technical Writers, Public Relations Workers | 45,270 ↓ 176/6 ↓ \$18,940-31,760 | Artistic HS | Foreign language proficiency a plus. Verbal and written skills essential. Degree in journalism may be required by some employers. Must be curious, persistent, and remember facts accurately. Hired by newspapers, magazines radio and television. |
| Public Relations Specialists (M) Promote ideas, services, or products. Build a good public image. Plan, organize, and carry out a program to influence and inform the public. May work with press or consumer relations. | Account Executives, Promotion Managers, Advertising Managers | 212,510 ↗ 439/19 → \$30,460-55,910 | 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. |
| Writers and Editors (M) Write or edit technical manuals, such as equipment manuals or operating and maintenance instructions or stories, advertisements or scripts. | Internet Researchers, Reporters, Public Relations Workers | 185,040 → 542/17 → \$23,473-45,830 | 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

BJCC BSC CCCC DCB DSU EATC FBCC FFS GKFS HAHD JC JSHDF JSHDGF JZT LRSC LW MIL MaSU MBC MSU MOCN NDSCS NDSU PAR RCB RCF SBC TBC THA TMCC TSPA UM UND UTTC VCSU WSC

ARTS, A/V TECHNOLOGY & COMMUNICATIONS

| | BJCC | BSC | CCCC | DCB | DSU | EATC | FBCC | FFS | GKFS | HAHD | JC | JSHDF | JSHDGF | JZT | LRSC | LW | MIL | MaSU | MBC | MSU | MOCN | NDSCS | NDSU | PAR | RCB | RCF | SBC | TBC | THA | TMCC | TSPA | UM | UND | UTTC | VCSU | WSC | | |
|---|------|-----|------|-----|-----|------|------|-----|------|------|----|-------|--------|-----|------|----|-----|------|-----|-----|------|-------|------|-----|--------|--------|-----|-----|-----|------|------|----|-----|------|------|-----|-----|-----|
| ART | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Art | | | 2 | A | 4 | | | | | | 4 | | | | | | | A | | 4 | | | 4 | | | | | | | | | | | 2 | 4 | | | |
| Art Entrepreneurship | | | | | 4 | | | | | | 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Art, Commercial | | | 1-2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Arts, Visual | | | | | | | | | | | 4 | | | | | | | | | | | | | | | | | | | | | | | 4G | | | | |
| Interior Design | | | | | | | | | | | | | | | | | | | | | | | 4 | | | | | | | | | | | | | | | |
| Music | | | | | 4 | | | | | | 4 | | | | | | | | | 4 | | A | 4G | | | | 4 | | | | | 4 | 4G | | 4 | A | | |
| Music Management | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 4 | | | |
| Musical Theatre | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 4 | | | | | |
| Theater Arts | | | | | 4 | | | | | | 4 | | | | | | | | | | 4 | | 4G | | | | | | | | | 4G | | | | | | |
| COMMUNICATION | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Broadcasting | | | | | | | | | | | | | | | | | | | | 4 | | | 4 | | | | | | | | | | | | | | | |
| Communications, Cross-Cultural | | | | | | | | | | | 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Communications, General/Mass | | | 2 | | 4 | | | | | | 4 | | | | | | | 4 | | 4 | | G | | | | | | | | | 4 | 4G | | 4 | A | | | |
| Communications, Health/Agriculture/Management | | | | | | | | | | | | | | | | | | | | | | 4 | | | | | | | | | | | | | | | | |
| Communications, Media | | | | | | | | | | | 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Communications, Organizational | | | | | | | | | | | 4 | | | | | | | | | | | | | | | | | | | | | 4 | | | | | | |
| Journalism | | | | | | | | | | | 4 | | | | | | | | | | | | 4 | | | | | | | | | | | | | | | |
| Public History | | | | | | | | | | | | | | | | | | | | | | | 4 | | | | | | | | | | | | | | | |
| Public Relations and Advertising | | | | | | | | | | | | | | | | | | | | | | | 4 | | | | | | | | | | | | | | | |
| Web Development | | | | | | | | | | | | | | | | | | | | | C | | | | | | | | | | | | | | | | | |
| Writing & Editing | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | C | | | |
| AUDIO/VIDEO TECHNOLOGY | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Desktop & Web Publishing | | | | | | | | | | | | | | | | | | | | | C | | | | | | | | | | | | | | | | | |
| Graphic Design Technology/New Art Media | | | 2 | | 1-2 | | | | | | | | | | | | | | | | | 4 | | 4 | 2,4* | 2,4* | | | | | | 4 | | | | | | |
| Information Processing | | | 1-2 | | | | | | | | | | | 1-2 | | | | | | | | 2 | | | | | | | | | | | | | | | 1-2 | |
| Library and Information Technologies | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | G | |
| Public Relations and Advertising | | | | | | | | | | | | | | | | | | | | | | | 4 | | | | | | | | | | | | | | | |
| Digital Audio Production | | | 2,A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Webmaster/Web Designer | | | 1-2 | | 1-2 | | | | | | | | | | | | | | | | | 4 | 1-2 | 4 | 1-2,2* | 1-2,2* | | | | | | | | | | | | 1-2 |

NOTES

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 Service Managers (M) Aid executives by coordinating services such as personnel, budget, housekeeping, records control, and special management studies. Make recommendations for solution of administrative problems. | Executive Secretaries, Business Managers, Medical Assistants, Facility Managers | 249,600 → 468/19 → \$47,340-89,360 | 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 | 2,828,140 → 10,834/408 → \$17,450-27,630 | 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 | 687,940 → 1,110/33 → \$19,470-33,210 | 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 Representatives | 2,212,820 → 5,099/252 → \$21,190-34,450 | 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 | 952,030 → 3,320/90 → \$29,390-46,610 | 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. |
| Janitors and Cleaners Keep buildings in clean and orderly condition. Clean floors, shampoo rugs, washing windows. | Window Cleaners, Hotel Maids, Gardeners | 2,068,460 → 7,258/215 → \$17,810-27,700 | Realistic ☀️ | Employers may prefer applicants with past experience, but most are willing to hire inexperienced people with a steady work record and a neat appearance. Most skills are learned on the job. |
| Legal Secretaries Perform secretarial duties, utilizing legal terminology and procedures. Prepares legal papers and correspondence of legal nature, such as summonses, complaints, motions, and subpoenas. | Administrative Assistants, Legal Assistants, Medical Secretaries | 220,680 → 605/11 → \$26,110-36,960 | 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 | 502,850 ↗ 669/28 ↗ \$22,020-33,220 | 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 | 1,364,720 → 2,720/109 → \$30,560-50,980 | 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. Promotion within the company is common. |
| Receptionists (M) Receive clients, customers, and others in offices and establishments. Make appointments. Provide information and answer inquiries by telephone or in person. May perform a variety of clerical duties such as typing, filing, and distributing mail. | Information Clerks, General Office Clerks | 973,800 ↗ 2,807/132 → \$19,470-27,620 | 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 | 1,955,570 → 3,394/59 → \$24,490-34,710 | 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. |

BUSINESS MANAGEMENT & ADMINISTRATION

| Occupational Title/Description | Related Occupations | Nat'l Employment ND Employment/ Proj. Openings ND Earnings | Holland Type Rating | Hiring Practices |
|---|---|---|-----------------------------|--|
| Postsecondary Programs – Bachelors Degree or More | | | | |
| Accountants and Auditors Prepare and analyze individual, division, or consolidated balance sheets to reflect company's assets, liabilities and capital. Plan and administer accounting services. Advise on accounting problems, plan and conduct audits of accounts. | Tax Accountants, Property Accountants, County/City Auditors | 1,085,150 → 2,903/126 ↗ \$36,050-63,090 | 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). |
| 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 Directors, Labor Relations Directors, Personnel Managers, Employee Development Directors, Industrial Psychologists | 133,480 → 242/9 → \$57,626-96,980 | 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 Conduct organizational studies and evaluations, design systems and procedures, conduct work simplifications and measurement studies and prepare operations/procedures manuals. | Human Resource Managers, Accountants | 538,950 ↗ 496/18 → \$43,660-82,910 | Conventional HS HW ☀️ | Despite projected rapid employment growth, keen competition is expected for jobs as management analysts. Because analysts can come from such diverse educational backgrounds, the pool of applicants from which employers can draw is quite large. |
| Public Relations and Fundraising Managers 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 | 53,200 → NA/NA \$43,330-80,770 | 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 Managers, Teachers | 205,680 ↗ 439/19 ↗ \$31,130-57,320 | Social HS HW ☀️ | Entry-level jobs are filled by college graduates who have majored in a wide range of fields. Keen competition for jobs is expected due to the abundant supply of qualified college graduates and experienced workers. |

| | BJCC | BSC | CCCC | DCB | DSU | EATC | FBCC | FFS | GKFS | HAHD | JC | JSHDF | JSHDGF | JZT | LRSC | LW | MIL | MaSU | MBC | MiSU | MOCN | NDSCS | NDSU | PAR | RCB | RCF | SBC | TBC | THA | TMCC | TSPA | UM | UND | UTTC | VCSU | WSC |
|--|------|-----|------|-----|-----|------|------|-----|------|------|----|-------|--------|-----|------|----|-----|------|-----|------|------|-------|------|-----|-----|-----|-----|-----|-----|------|------|----|-----|------|------|-----|
|--|------|-----|------|-----|-----|------|------|-----|------|------|----|-------|--------|-----|------|----|-----|------|-----|------|------|-------|------|-----|-----|-----|-----|-----|-----|------|------|----|-----|------|------|-----|

| BUSINESS MANAGEMENT AND ADMINISTRATION | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|------|---|-----|----|--|---|--|--|--|---|--|--|--|-----|--|---|---|--|----|---|------|----|----------------|--------------|-----|-----|-----|---|---|-----|---|-----|------|--|-------|------|--|
| Administrative Assistant | 1 | 1-2 | 2 | 2* | 2 | | 1 | | | | | | | | 1-2 | | M | | | | | 1-2* | | | | | | | 2 | | | 2 | | 1-2* | | | | |
| Legal | | 1-2 | | 2* | 2 | | | | | | | | | | 1-2 | | M | | | | | A | | | | | | | | | | | | | | | | |
| Medical | 1 | 1-2 | | 2* | | | | | | | | | | | | | M | | | 2* | | A | | | | | | | | | | | | | | | | |
| Accountancy | | | | 2 | | | | | | | | | | | | | | | | | | | 4+ | | | | | | | | | | 6 | 4G | | | | |
| Accounting | | | | A | 4 | | | | | | 4 | | | | 2 | | | A | | 4 | | 4 | | 1-2,1,2,1,2,4* | 2,4* | | | | | | | 4 | 4G | | | 2A | | |
| Accounting & Computing | | 4*,A | | 2* | | | | | | | | | | | 2 | | | | | | | | | | | | | | | | | | | | | | | |
| Administrative Assistant/Health Information Management | | | | 2 | | | | | | | | | | | | | | | | | | 2A | | | | | | | 2 | | | | | | | 1-2* | | |
| Advertising and Marketing | | | | 1-2 | | | | | | | 4 | | | | | | | | | | | | | | | | | | | | | | | | | A | | |
| Application Software Specialists | | | | | | | | | | | | | | | | | | | | | C | | | | | | | | | | | | | | | | | |
| Art Entrepreneurship | | | | | 4 | | | | | | | | | | | | | | | | | | | | | | 1-2 | | | | | | | | | | | |
| Bookkeeping | 1 | | | 1* | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Business Administration & Management | | 4*,A | | 2A | 4 | | | | | | 4 | | | | 2A | | M | 4 | | G | | 2A | 4G | 1,1-2,2,2,4* | 1,1-2,2,2,4* | 2-4 | 2 | | | | 4G | G | 2,4 | 4 | | | | |
| Business and Management, General/Applied | | 2 | 2 | 1 | | | 2 | | | | 4 | | | | | | M | 2 | | 4G | | 1-2 | | | | | | | | | 2-4 | 4 | | | | A,1-2 | | |
| Business Management, Tribal Management | | | | | | | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Business Integration Management | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 4 | |
| Computerized Office Management | | | | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Construction Management | | | | | | | | | | | | | | | | | | | | | | | 4 | | | | | | | | | | | | | | | |
| Customer Relationship Management | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | C | |
| Digital Enterprise | | | | | | | | | | | | | | | | | | | | | | | C | | | | | | | | | | | | | | | |
| Energy Management/Economics & Finance | | 4* | | | | | | | | | | | | | | | | | | 4 | | | | | | | | | | | | | | | | | | |
| Entrepreneurship | | C* | | | C | | | | | | | | | | | | | | | | | A | | 1-2,2* | 1-2,2* | 1-2 | | 1 | | 4 | C,4 | | | | | | 1-2* | |
| Hotel/Restaurant/Hospitality/Tourism Management | | 1-2 | | | | | | | | | 4 | | | | | | | | | | | 2 | 4 | | | | | | | | | | | | | | | |
| Human Resources | | | | | | | | | | | 4 | | | | | | | | | | | | | 1-2,2,4* | 1-2,2,4* | | | | | | | | | | | | | |
| Human Resources Development/Management | | | | | C | | | | | | 4 | | | | | | M | | | | | | C | | | | | | | | | G | 4 | | | 4 | | |
| Information Processing | | 1-2* | | | | | | | | | | | | | 1-2 | | M | | | 2* | | | | | | | | 1-2 | | | | | | 2 | | 1-2* | | |
| International Business | | | | | 4* | | | | | | 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

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 | | | | |
| Preschool Teachers: Except Special Ed Instruct children (normally up to 5 years of age) in activities designed to promote social, physical and intellectual growth. | Elementary School Teachers, Day Care Center Workers | 349,430 ↗ 339/12 → \$17,560-27,130 | 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. |
| 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 | 169,200 ↗ 197/6 → \$17,060-40,470 | 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 | 1,214,090 → 4,370/144 → \$20,040-29,110 | Social ☀️ | Some employers prefer applicants with formal training; however, others train their workers on the job. Emphasis is placed on experience in working with young people. May be part-time workers. |
| Postsecondary Programs – Bachelors Degree or More | | | | |
| Counselors, Education and Vocational (M) Counsel individuals and provide group educational and career guidance services. | Clinical Psychologists, School Social Workers, Employment Counselors | 244,560 → 648/23 → \$34,540-55,470 | 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. |
| Education Administrators 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. | CTE Director, Corrections Education Supervisors, Deans of Students | 385,750 → 583/22 → \$43,686-80,010 | 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. |
| 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 | 1,461,760 → 3,161/87 → \$42,687-73,874 | Investigative HS HW | Must have at least a master's degree. Some universities require a doctoral degree. Must have good communication skills and needs 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 | 10,500 → NA/NA \$30,730-58,330 | 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. |
| Teachers, Career and Technical Education Secondary School Teach or instruct career and technical education subjects at the secondary school level. | Secondary Teachers, CTE Counselors, Software Trainers | 88,210 → 465/13 ↘ \$31,420-49,660 | 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 | 1,415,590 → 5,432/201 → \$32,600-50,100 | 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. | CTE Counselors, School Administrators, Sales Representatives | 1,004,850 → 2,666/87 → \$32,840-47,530 | 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 | 220,220 → 718/34 → \$36,960-52,200 | 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

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

NOTES

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 | | | | |
| 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 | 390,800 → 1,425/46 → \$22,760-33,580 | 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 Technicians | 1,643,470 → 7,419/245 ↗ \$23,840-37,480 | 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. |
| Claims Adjusters, Examiners, Investigators Review settled claims to determine that payments and settlements have been made in accordance with company procedures. Report over or under payments and other irregularities. | Loan Officers, Real Estate Appraisers | 263,810 → 901/31 → \$33,700-54,940 | 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 | 321,780 ↗ 1,572/72 ↗ \$29,140-88,350 | 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. |
| Tellers Receive and pay out money for financial institutions. Keep records of money and negotiable instruments involved in various transactions. | Cashiers, Post Office Clerks, Travel Agents | 544,150 → 2,391/131 → \$20,070-26,010 | Conventional ☀️ | Chances of employment may be enhanced through career and technical education training and on-the-job training. |
| Postsecondary Programs – Bachelors Degree or More | | | | |
| Financial Managers Determines budgets, what programs to offer, and make sure programs are carried out effectively. Prepare financial reports required by firm to conduct its operations and satisfy tax and regulatory requirements. | Loan Officers, Accountants, Auditors | 477,690 → 1,158/37 → \$59,510-113,740 | 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, Auditors, Financial Managers | 284,530 → 1,179/59 ↗ \$38,180-68,630 | 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 | 307,020 → 295/13 → \$31,330-99,770 | 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 | JC | JSHDF | JSHDGF | JZT | LRSC | LW | MIL | MaSU | MBC | MISU | MOCN | NDSCS | NDSU | PAR | RCB | RCF | SBC | TBC | THA | TMCC | TSPA | UM | UND | UTTC | VCSU | WSC | |
|--|------|-----|------|-----|-----|------|------|-----|------|------|----|-------|--------|-----|------|----|-----|------|-----|------|------|-------|------|-----|-----|-----|-----|-----|-----|------|------|----|-----|------|------|-----|---|
| FINANCE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Accountancy | | | | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 4 | | |
| Accounting | | | 2 | A | 4 | | | | | | 4 | | | | 2 | | | A | | 4 | | | 4 | | 4* | 4* | | | | | | | 4 | 4G | | 2A | |
| Accounting & Computing | | 4*A | | 2* | | | 1-2 | | | | | | | | 2 | | M | | | | | | | | | | | | | | | | | | | | |
| Banking & Finance | | | | | | | | | | | 4 | | | | | | | | | 4 | | A | C | | | | | | | | | | | 4 | 4 | | A |
| Bookkeeping | 1 | | | 1* | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Business Economics/Economics/Applied Economics | | | | A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 4-G | | A |
| Economics/Applied Economic | | | | | | | | | | | | | | | A | | | | | | | | | 4 | | | | | | | | | | 4G | | A | |
| Family Financial Planning | | | | | | | | | | | 4 | | | | | | | | | | | | C | | | | | | | | | | | | | | |
| Finance | | | | | | | | | | | | | | | A | | | | | | | | A | C | | | | | | | | | | 4 | | | |
| Investments | | | | | | | | | | | | | | | | | | | | | | | | 4 | | | | | | | | | | | | | |
| Managerial Finance and Accounting | | | | | | | | | | | 4 | | | | | | | | | | | | 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 – 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. | Agricultural Commodities Inspectors, Occupational Health and Safety Inspectors, Transportation Inspectors | 210,510 → 842/19 → \$37,620-64,570 | 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 Plan, organize or coordinate the activities of a social service program or community outreach organization. Oversee program, budget and policies. | Social Workers, Marketing Managers, Public Relations Managers | 115,550 ↗ 559/18 → \$36,980-60,440 | 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

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 | 50,410 ↗ 69/3 ↗ \$33,090-57,940 | 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 | 296,810 ↗ 576/19 → \$28,190-37,660 | 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 | 184,110 ↗ 598/23 → \$41,610-63,690 | Social HS HW ☀ | Must be a graduate of an approved training program. License required. Hired by dental offices, public health offices, hospitals or clinics. |
| Dietetic Technicians Assist dieticians in the providing of food service and nutritional programs. | Dieticians, Family & Consumer Sciences Specialists, Food Service Managers | 23,490 → 67/2 → \$20,990-29,600 | 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 | 60,680 ↗ 357/11 → \$21,400-29,980 | Enterprising HS | Employers look for high school graduates who have had courses in the sciences 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 Nurses Aides, Surgical Technicians, Licensed Practical Nurses | 229,340 ↗ 634/29 ↗ \$16,920-33,820 | Social HS ☀ | There are three levels of trained EMTs ranging in responsibility from administering immediate first aid to more sophisticated care techniques, such as intravenous therapy. Hired by hospitals, private firms, police and fire departments. |
| Health Unit Coordinators (M) Keep track of the activities that converge at nursing stations in hospitals and clinics. They must understand medical terminology, have familiarity with many drugs that are given, and medical procedures that are to be scheduled. | Ward Clerks, Medical Assistants | 539,220 ↗ 370/12 → \$48,210-30,560 | Conventional ☀ | Employers prefer applicants with a one-year diploma from a technical college Health Unit Coordinator program or National HUC certification. They must have good communication skills, accuracy, dependability, and enjoy working with others and be able to work under stress. |
| Home Health Aides Care for patient's needs in the patient's home by changing linens and doing laundry. Purchase, prepare, and serve meals. Assist patient with bathing, dressing, and other personal needs after major surgery or illness. | Nurse Aides, Physical Therapy Aides, Occupational Therapy Aides | 924,650 ↗ 2,041/106 ↗ \$19,820-29,080 | 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 Therapist Assistants | 63,810 ↗ 266/6 → \$18,300-69,070 US | 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 | 156,860 → 516/14 → \$30,060-41,760 | 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 Nurses | 539,220 ↗ 370/12 → \$22,570-30,560 | 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 | 180,280 ↗ 587/20 → \$23,650-34,590 | 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 (M) Use transcribing machines to listen to recordings by physicians and other healthcare professionals dictating medical reports. Translate medical jargon and abbreviations into expanded forms. | Medical Secretaries, Court Reporters | 76,570 → 651/10 ↘ \$23,940-34,300 | 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 Aides, Orderlies, including Cert. Nurses Aides (M) Provide basic patient care under direction of nursing staff. Perform duties such as feed, bathe, dress, group or move patients or change linens. | Home Health Aides, Nurses Aides, Psychiatric Aides | 1,466,700 ↗ 6,736/163 → \$21,400-28,550 | 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. |
| 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 | 729,140 ↗ 3,368/133 → \$30,930-39,780 | 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 | 2,724,570 ↗ 7,137/285 ↗ \$42,230-65,290 | Social HS HW ☀️ | Nursing degree can be obtained in two years or four years of college. Must pass examination given by State Board of Nursing in order to be licensed. |
| Occupational Therapy Assistants (M) Assist occupational therapists in providing occupational therapy treatments and procedures. | Physical Therapist Assistants, Occupational Therapists | 29,130 ↗ 90/3 ↗ \$32,910-46,810 | 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 Assistants, Certified Nurses Aides, Surgical Technicians | 343,550 ↗ 675/27 ↗ \$55,980-35,190 | Conventional HS ☀️ | Two-year degree in pharmacy technology. |
| Physical Therapy Aides and Assistants (M) Assist physical therapists in providing physical therapy treatments and procedures. | Occupational Therapy Assistants, Physical Therapists | 115,190 → 251/8 ↗ \$24,595-36,735 | 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 | 220,000 ↗ NA/NA \$36,510-76,850 US | Realistic HS HW | Successful completion of two to four years of formal training is necessary. Ability to deal with people essential. Hired by hospitals, clinics, and dental offices. Certification required. |
| Respiratory Therapists (M) Following a doctor's 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 | 113,980 ↗ 211/11 ↗ \$40,310-50,440 | 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 | 94,490 → 249/8 → \$31,310-41,010 | 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 | 78,800 ↗ 190/12 ↑ \$24,450-32,260 | Realistic HS ☀️ | Certified veterinary technicians must graduate from a two or four-year veterinary technology program. Veterinary technicians work in veterinary clinics, zoos, research clinics, colleges, and private businesses such as pet stores, boarding and grooming facilities. |
| 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 | 27,510 ↗ 157/5 → \$44,500-110,110 | Investigative HS HW | Most students enroll in two to four year pre-med curriculum then transfer to a chiropractic school. Most are engaged in independent practice. License required. |
| Dentists (M) Diagnose and treat diseases, injuries and malformations of teeth, gums and related oral structures. | Psychologist, Optometrists, Physicians, Veterinarians, Podiatrists | 90,950 ↗ 237/9 → \$100,520-NA | Investigative HS | A four-year program after completion of a bachelor's degree 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. |
| 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 Specialists, Food Service Managers, Dietetics Assistants | 56,130 ↗ 234/11 → \$38,020-55,360 | 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 Managers (M) Manages medical and health services in hospitals, businesses or schools. May run health care facility. Prepares budgets, hires staff, plans and directs health care services. | Community Health Nursing Directors, Emergency Medical Services Coordinators | 287,560 ↗ 685/27 → \$53,410-84,520 | 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. |

HEALTH SCIENCE

| | BIJC | BSC | CCCC | DCB | DSU | EATC | FBCC | FFS | GFKFS | HAHD | JC | JSHDF | JSHDGF | JZT | LRSC | LW | MIL | MaSU | MBC | MISU | MOCN | NDSCS | NDSU | PAR | RCB | RCF | SBC | TBC | THA | TMCC | TSPA | UM | UND | UTTC | VCSU | WSC |
|--|------|------|------|------|-----|------|------|-----|-------|------|----|-------|--------|-----|------|----|-----|------|-----|------|------|-------|------|-------------|-------------|-----|-----|-----|-----|------|------|-----|-----|------|------|------|
| HEALTH SCIENCE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Community Health | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 | |
| Conflict Transformation | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | C | |
| Couple and Family Therapy | | | | | | | | | | | | | | | | | | | | | | | 4G | | | | | | | | | | | | | |
| Cytotechnology | | | | | | | | | | | | | | | | | M | | | | | | | | | | | | | | | | | 4 | | |
| Dental Assisting | | | | | | | | | | | | | | | | | | | | | | | 1,2 | | | | | | | | | | | | | |
| Dental Hygiene | | | | | | | | | | | | | | | | | | | | | | | 2 | | | | | | | | | | | | | |
| Developmental Sciences | | | | | | | | | | | | | | | | | | | | | | | G | | | | | | | | | | | | | |
| 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 and Technician | | | | | | | | | | | | | | 1-2 | | | | | | | | | | | | | | | | | | | | | | |
| Food and Nutrition/Community Nutrition | | | | | | | | | | | | | | | | | | | | | | | G | | | | | | | | | 4 | | | A | |
| Gerontology | | | | | | | | | | | | | | | | | | | | | | | C | | | | | | | | | | | | | |
| Health Administration | | | | | | | | | | 4 | | | | | | | | | 4 | | | | | | 1-2, 2* | | | | | | G | C | | | | |
| Health Information Technology | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 | | |
| Health Information/Technician/Management | 1-2 | | | | | | | | | | | | | | | M | | | | | | 2* | | 1,1- 2,2,4* | 1,1- 2,2,4* | | | | | | | | | | 1-2 | |
| Health Science | | | A | | | | | | | | | | | | A | | | | | | | | | | | | | | | | | | | | 4 | |
| Histotechnician | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | C | | | |
| Massage Therapy | | | | | | | | | | | | 1 | | | | | | | | | | | | | | | | | | 1 | | | | | | 1-2* |
| Medical Assistant | | 2* | 1-2 | 2* | | | | | | | | | | | | M | | | | | | | | | | | | | | | | | | | | |
| Medical Coding | 1 | | | 1* | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Medical Lab Science | | | | | | | | | | | | | | | | | | | | 4 | | | 4 | | | | | | | | | 4G | | 4 | | |
| Medical Laboratory Technician | | 2A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Medical Secretary | 1 | | | | | | | | | | | | | | | | | | 2* | | | 2 | | | | | | | | | | | | | 1-2* | |
| Medical Transcription | | | | 1* | | | | | | | | | | | | | | | | | | | 1* | | | | | | | | | | | 2 | | A |
| Medicine (Physicians) | | | | | | | | | | 4 | | | | | A | | | | | | | | | | | | | | | | | G | | | 1-2* | |
| Mental Health Care Associate | | | | | | | | | | | | | | | | | | | | | | | 2 | | | | | | | | | | | | | 1-2* |
| Nurse Assistant | 1 | 1 | 2 | | | | 1 | | | | | | | | 1 | | | | | | | | | | | | | | | | | | | | | |
| Nurse Practitioner/Specialist | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | G | C,G | | | | |
| Nursing Administration | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | G | | | 1* | |
| Nursing, Practical | 1 | | | 1 | 2 | | 1-2 | | | | | | | | 2 | | | | | | | | 2* | | | | 2 | | | | | | 2 | | 2* | |
| Nursing, Registered | 2 | 2A | | 2 | 4 | | 2 | | | 4 | | | | A | | | | | | 4 | 4 | 2 | 4G | | | | | | | 4G | 4G | | | | | |
| Nutrition and Foodservice | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 | | |
| Occupational Safety and Environmental Health | | | | | | | | | | | | | | | | | M | | | | | | | | | | | | | | | | 4 | | A | |
| Occupational Therapy | | | | | | | | | | 4 | | | | | | | M | | | | | | | | | | | | | | G | G | | | | |
| Occupational Therapy Assistant | | | | | | | | | | | | | | | | | M | | | | | | 2 | | | | | | | | | | | | | |
| Paramedic (EMT) Technology | | | | 1-2* | | | | | | | | | | | | | | | | | | | 1-2* | | | | | | | | | | | | | |
| Pharmaceutical Sciences | | | | | | | | | | 4 | | | | | A | | | | | | | | | 4G | | | | | | | | | | | | |
| Pharmacy Doctorate | | | | | | | | | | | | | | | | | | | | | | | | G | | | | | | | | | | | | |
| Pharmacy Technician | | | | | | | | | | | | | | | | | M | | | | | | 1-2 | | | | | | | | | | | | | |
| Phlebotomy Technician | | 1 | | | | | | | | | | | | | | | M | | | | | | | | | | | | 1 | | | | | | A | |
| Physical Therapy | | | | | | | | | | 4 | | | | | | | M | | | | | | | | | | | | | | G | 4G | | | 2 | |
| Physical Therapy Assistant | | | | | | | | | | | | | | | | | M | | | | | | | | | | | | | | | | | | | |
| Physician Assistant Studies | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Psychology, Clinical | | | | | | | | | | 4 | | | | | | | | | | | | | | | | | | | | | | G | | | A | |
| Psychology, Counseling | | | | | | | | | | 4 | | | | | | | | | | | G | | | | | | | | | | | | G | | | |
| Psychology/Applied Psychology/Experimental | | | | | 4 | | | | | 4 | | | | A | | 4 | 4 | | | | | A | 4G | | | | | | | 4 | 4G | | 4 | | | |
| Public Health | | | | | | | | | | | | | | | | | | | | | | | | C,G | | | | | | | | G | | | | |
| Radiologic Technology/Sciences | | | | | | | | | | 4 | | | | | | M | | | 4 | | | | | | | | | | | | 4 | | | | A | |
| Recreation Management, Sports and Recreational Studies | | | | 1-2* | | | | | | 4 | | | | | | | | | | | | | | 4 | | | | | | | | | 4 | | | |
| Respiratory Care | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 4G | | | | |
| School Psychology | | | | | | | | | | | | | | | | | | | | | | | G | | | | | | | | | | | | | |
| Speech-Language Pathology | | | | | | | | | | | | | | | | | | | | | | | 4G | | | | | | | | | G | | | 2* | |
| Speech-Language Pathology Assistant | | | | | | | | | | | | | | | 2 | | | | | | | | | | | | | | | | | | | | | |
| Surgical Technology | | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Veterinary Technology | | | | | | | | | | | | | | | | | | | | | | | | 4 | | | | | | | | | | | | A |

HOSPITALITY & TOURISM



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

| Occupational Title/Description | Related Occupations | Nat'l Employment ND Employment/ 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 | 17,150 → 154/6 → \$29,680-40,740 | 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. |
| Chefs and Head Cooks (M) Direct the preparation, seasoning and cooking of salads, soups, fish, meats, vegetables, desserts or other foods. | Caterers, Bakers, Decorators | 2,221,870 → 6,543/240 → \$21,200-30,620 | Realistic ☀️ HS | Most employers prefer applicants with past experience, career and technical education training, or completion of an apprenticeship program. |
| Food Services Managers (M) Manages businesses that serve food such as cafeterias and restaurants. Determines the types, prices and amounts of goods and services sold. Hires and supervises staff, plans budgets. | Hotel/Motel Managers, Department Store Managers, Sales Managers | 183,940 ↘ 472/9 ↘ \$32,630-53,950 | Enterprising HS HW | Many positions filled with experienced food service workers. Employers prefer two and four-year graduates of food services management programs. Good communication skills essential. |
| Gaming Dealers Stand or sit behind table and operate games of chance by dispensing the appropriate number of cards or blocks to players, or operating other gaming equipment. Compare the house's hand against players' hands and payoff or collect players' money or chips. | Tellers, Waiters/ Waitresses | 88,370 → 1,185/60 → \$16,890-27,910 | Realistic HS ☀️ | Training obtained through a technical school or may receive training on the job. Must have neat appearance, work well with people, and be 21 years old. Must work rapidly and accurately with arithmetic. |
| Hosts and Hostesses Welcome patrons, seat them at table or in lounge, and help ensure quality of facilities and service. | Waiters/Waitresses, Flight Attendants | 329,070 → 1,065/86 → \$16,780-18,620 | Enterprising ☀️ | Most are trained on the job. Must be able to work in a rapid and cordial manner. A clean, neat appearance and pleasant manner is necessary. Hired by restaurants, hotels, and bars. |
| Hotel Desk Clerks (M) Register guests and assign rooms in hotels and similar establishments. Receive telephone messages for guests. Collect payment for room charges when guests leave. | Receptionists, Sales Clerks | 224,430 → 1,060/65 ↗ \$16,960-20,290 | Conventional ☀️ | Employers prefer applicants with clerical ability and a knowledge of bookkeeping. Must enjoy working with people and display a courteous and friendly manner. |
| Instructors, Sports (Coaches) (M) Teach sport activity to individuals or groups at private recreational facility or school. Explain, demonstrate, observe, lecture, and motivate participants. Organizes and conducts competition and tournaments. | Recreation Programmers, Athletic Trainers, Golf Club Professionals | 193,810 ↗ 420/23 ↗ \$16,880-38,130 | Social HS ☀️ | May instruct at park and recreation facilities, camps, or schools. Must be able to work with children and adults. Good communication skills and athletic ability necessary. Those who teach in schools must hold a teacher's license. |
| Lodging Managers Plan, organize, direct and control the operation of hotels and motels. Set policies, hire personnel and determine work schedules. Handle customer and worker complaints. | Restaurant Managers, Apartment Building Managers | 29,870 → 188/8 → \$32,020-49,010 | Enterprising HS HW | Employers look for an individual with management skills that can be gained either in formal training or through experience. Must be able to organize and direct the work of others. Employers may require graduates of 2-4 year hotel/motel management program. |
| Maids and Housekeeping Cleaners Make beds, replenish linens, clean and vacuum rooms and halls, and perform related services in hotels, motels, tourist homes, and other lodging facilities. | Janitors, Maintenance Engineers | 877,980 → 5,247/143 → \$16,900-20,890 | Realistic ☀️ | Employers may prefer a high school graduate. Must be able to deal effectively with people. |
| Recreation Workers Plan and organize public recreation programs, playgrounds, camps, etc. Coordinate programs for children and adults. Promote interest in crafts, games, and organized recreation. | Sports Statisticians, Coaches | 301,840 → 1,101/32 ↘ \$17,940-30,100 | Social ☀️ | Training ranges from a high school diploma to a bachelor's degree. A number of these positions are part-time, seasonal, and volunteer. Work in hospitals, prisons, private and public recreation facilities. |
| Travel Agents Plan itineraries and arrange accommodations and other travel services for customers. May plan and sell package tours. Compute costs, make hotel reservations, obtain collect payment. | Tour Guides, Reservation Agents, Cruise Directors | 67,490 → 408/4 ↘ \$17,890-33,560 | Enterprising HS | Employers prefer career and technical education training and experience. Pleasant manner and sales ability necessary. Hired by travel agents, airlines, or are self-employed. |
| Waiters and Waitresses Take orders and serve food and beverages to patrons at tables in dining establishment. | Flight Attendants, Counter Workers, Hosts and Hostesses | 2,289,010 → 7,372/482 → \$16,860-20,770 | Social ☀️ | Most learn their skills on the job. Many are students working part-time. Must be at least 21 if alcoholic beverages are served. |

| HOSPITALITY AND TOURISM | BICC | BSC | CCCC | DCB | DSU | EATC | FBCC | FFS | GKFS | HAHD | JC | JSHDF | JSHDGF | JZT | LRSC | LW | MIL | MaSU | MBC | MISU | MOCN | NDSCS | NDSU | PAR | RCB | RCF | SBC | TBC | THA | TMCC | TSFA | UM | UND | UTTC | VCSU | WSC | | |
|--|------|-----|------|------|-----|------|------|-----|------|------|----|-------|--------|-----|------|----|-----|------|-----|------|------|-------|------|-----|-----|-----|-----|-----|-----|------|------|----|-----|------|------|-----|--|---|
| Athletic Training/Corp Fitness/Human Performance & Fitness | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Culinary Arts | 1-2 | | | | | | | | | | | | | | | | | | | | | 1-2 | | | | | | | | | | | | | | | | |
| Exercise Science/Leisure Studies/Sports Management | | | | | | | | | | | 4 | | | | | | | | | | | | | | | | | | | | | | 4 | | | 4 | | |
| Fitness Trainer Technician | | | | | 1-2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Hotel/Restaurant/Hospitality/Tourism Management | | | | | | | | | | | 4 | | | | | | | M | | | | 2 | 4 | | | | | | | | | | | | | | | |
| Recreation Management, Sports and Recreational Leadership | | | | 1-2* | | | | | | | 4 | | | | | | | | | | | | 4 | | | | | | | | | | | 4 | | | | A |

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 | | | | |
| Child Care Workers Attend to children at schools, businesses, private households and child care institutions. | Teacher Aides, Home Care Aides | 631,240 ↗ 4,222/166 → \$16,840-18,520 | Social ☀️ | Employers may prefer career and technical education training. Must have the desire and ability to work with small children. |
| 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 Therapy Assistants, Physical Therapist Assistants, Nurse Assistants | 820,600 ↗ NA/NA \$20,920-28,020 | 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 and Human Service Assistants 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 | 359,860 ↗ 1,554/54 → \$34,430-32,780 | 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 | 42,560 → 1,211/29 → \$26,800-56,000 | 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 | 110,690 ↗ 219/7 → \$32,540-46,260 | 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. |
| Medical and Public Health Social Workers Provide persons, families or vulnerable populations with psychosocial support needed to cope with chronic, acute or terminal illnesses. | Social Workers, Clergy | 133,890 ↗ 439/20 ↗ \$31,980-44,780 | 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) Plan and carry out experiments. Observe human beings and animals. Give psychological tests and provide group and individual counseling. May specialize in educational, developmental, or social psychology. | Social Workers, Counselors, Clergy, Industrial Psychologists | 102,080 → NA/NA \$48,240-69,710 | 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 | 276,510 ↗ 474/17 → \$31,090-48,320 | 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 | GKFS | HAHD | JC | JSHDF | JSHDGF | JZT | LRSC | LW | MIL | MaSU | MBC | MISU | MOCN | NDSCS | NDSU | PAR | RCB | RCF | SBC | TBC | THA | TMCC | TSPA | UM | UND | UUTC | VCSU | WSC | | |
|--|------|------|------|-----|-----|------|------|-----|------|------|----|-------|--------|-----|------|----|-----|------|-----|------|------|-------|------|----------|----------|-----|-----|------|-----|------|------|----|-----|------|------|------|--|--|
| HUMAN SERVICES | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Addiction Studies | | | | | | | 2 | | | | 4 | | | | | | M | | | 4* | | | | | | | | | | | | | 4 | | | A | | |
| Anthropology | | | | | | | | | | | | | | | | | | | | | | | G | | | | | | | | | | | | | | | |
| Behavioral Statistics | | | | | | | | | | | | | | | | | | | | | | | 4 | | | | | | | | | | | | | | | |
| Community Management/Development | | | | | | | | | | | | | | | | | | | | | | | G | | | | | | | | | | | | | | | |
| Conflict Transformation | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | C | | | | |
| Couple and Family Therapy | | | | | | | | | | | | | | | | | | | | | | | 4G | | | | | | | | | | | | | | | |
| Eligibility Worker | | C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Forensic Psychology | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | G | | | | |
| Gerontology | | | | | | | | | | | | | | | | | | | | | | | C | | | | | | | | | | | | | | | |
| Human Services | | 2 | | | | | 2 | | | | | | | | | | | | | | | | | 1,1-2,2* | 1,1-2,2* | | | | | | | | | | | | | |
| Human Services Technician | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 | | | | | | | | | | | |
| Intercultural Studies | | | | | | | | | | | | | | | | | | | | | | | | | | | | 4 | | | | | | | | | | |
| Mental Health Care Associate | | | | | | | | | | | | | | | | | M | | | | | 2 | | | | | | | | | | | | | | 1-2* | | |
| Philosophy and Religion | | | | | | | | | | | 4 | | | | | | | | | | | | 4 | | | | | 2-4* | | | 4 | 4 | | | | A | | |
| Policy Analysis | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | C | | | | | |
| Psychology, Clinical | | | | | | | | | | | 4 | | | | | | | | | | | | | | | | | | | | | | | G | | A | | |
| Psychology, Counseling | | | | | | | | | | | 4 | | | | | | | | | | | | | | | | 4 | | | | | | G | | A | | | |
| Psychology/Applied Psych/Experimental Rehabilitation & Human Services | | | | | 4 | | | | | | 4 | | | | A | | 4 | | 4 | 4 | | A | 4G | | | | | | | | 4 | 4G | | 4 | | | | |
| School Psychology | | | | | | | | | | | | | | | | | | | | | | G | | | | | | | | | | | | 4 | | | | |
| Social Work | | 4*,A | | | | | | | | | | | | | | A | | | | | | | | | | | | | | | | | 4 | 4G | | A | | |
| Sociology | | | | A | | | | | | | | | | | | A | | | | | | | | | | | | | | | | | 4G | | | A | | |

NOTES

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 and Office Machine Repairers (M) Repair, maintain, or install computers, word processing systems, automated teller machines, and electronic office machines, such as duplicating and fax machines. | Electronic Repairers, LAN Technicians, Data Recovery Specialists | 111,690 → 440/12 → \$24,530-42,700 | 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. |
| 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 Technicians, Webmasters | 77,280 ↘ 294/3 ↘ \$21,780-40,910 | Conventional | High school diploma required. Employers prefer applicants with experience in computer operation or those formally trained. Must be adaptable and willing to learn. |
| Computer Support Specialist (M) Provide technical assistance and training to computer system users. Investigate and resolve computer software and hardware problems of users. Answer client's questions concerning the use of computer hardware and software. | Computer User Support Specialists, Computer and Network Support Specialists, LAN Technicians, Data Recovery Specialists, Computer Repairers | 632,490 → 2,182/109 ↗ \$26,530-51,650 | Investigative HS HW ☀️ | 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. |
| Postsecondary Programs – Bachelors Degree or More | | | | |
| Computer and Information Systems Managers Plan, direct or coordinate activities in electronic data processing, information systems, systems analysis and computer programming. | Computer Systems Analysts, Computer Programmers | 300,830 → 545/19 → \$62,510-98,010 | 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, Webmasters | 320,100 → 576/19 → \$35,980-59,730 | 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 Designers, Webmasters, Engineers | 487,740 ↗ 958/39 ↗ \$37,860-72,220 | 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. |
| Data Base Administrators (M) Coordinate changes to computer databases, test and implement the database, applying knowledge of database management systems. | Computer Programmers, Data Recovery Specialists | 108,500 ↗ 157/9 ↗ \$45,900-72,330 | 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 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 Specialists, Network Security Analysts, Internet Security Specialists | 272,670 → 489/16 → \$41,750-73,490 | 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 Coordinators | 341,800 ↗ 563/25 ↗ \$43,770-66,750 | 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, Applications (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 Technicians, Computer Hardware Designers | 539,880 ↗ 771/26 ↗ \$46,660-72,670 | Investigative HS HW ☀️ | Employers may prefer applicants with a graduate degree. Must have creative, analytical minds and capacity for detail. Communication essential. Must be licensed. Hired by research laboratories, industrial plants, and government. |

INFORMATION TECHNOLOGY

| | BJCC | BSC | CCCC | DCB | DSU | EATC | FBCC | FFS | GFKFS | HAHD | JC | JSHDF | JSHDGF | JZT | LRSC | LW | MIL | MaSU | MBC | MISU | MOCN | NDSCS | NDSU | PAR | RCB | RCF | SBC | TBC | THA | TMCC | TSPA | UM | UND | UTTIC | VCSU | WSC |
|---|------|------|------|-----|-----|------|------|-----|-------|------|----|-------|--------|-----|------|----|-----|------|-----|------|------|-------|------|----------|----------|----------|-----|-----|-----|------|------|----|-----|-------|-------|-----|
| INFORMATION TECHNOLOGY | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Application Software Specialists | | | | | | | | | | | | | | | | | | | | C | | | | | | | | | | | | | | | | |
| Computer Information Systems | | | | 2A | | | 2 | | | | 4 | | | | 2 | | | 4 | | | | 1-2 | | | | | | | | | 4 | | | | 4 | |
| Computer Information Technology | | | 2 | | | | | | | | 4 | | | | | | | | | | | | | | 1,1-2,2* | 1,1-2,2* | | | | | | | | 2 | | |
| Computer Science/Programming | | 4*A | | | 4 | | | | | | 4 | | | | A | | | | | C,4 | | 2A | 4G | | 4* | 4* | | | | | | | 4G | | 1-2,A | |
| Computer Support Specialist | | 2* | | | | | | | | | | | | | | | | | | | | 2 | | | | | | 1-2 | | | | | | 2 | | |
| Computer Systems Tech | | | | | | | | | | | | | | | | | | | | | | 1 | | | | | | | | | | | | | 2 | |
| Computer Technology Management | | | | | 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Computerized Office Management | | | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Customer Relationship Management | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | C | |
| Database Administration | | | | | | | | | | | | | | | | | | | | | | | | | 1-2,2* | 1-2,2* | | | | | | | | | | |
| Database Technology | | | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Engineering, Computer | | | | | | | | | | | | | | | | | | | | | | 4G | | | | | | | | | | | | | | |
| Enterprise Applications | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 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 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1-2 |
| Information Systems | | | | | | | | | | 4 | | | | | | | | | | G | | | | | | | | | | | | | | | | |
| Information Technology | | | 2 | | | | | | | 4 | | | | | | | | C | | | | | | | | | 2 | | | | 4 | | | | 1-2 | |
| Knowledge Management | | | | | | | | | | | | | | | | | | | | C | | | | | | | | | | | | | | | | |
| Management Information Systems/ Information Tech | | | | | | | | | | 4 | | | | 1-2 | | | | | | | 4 | A | 4 | | 2* | 2* | | | | | 4 | 4 | | | 1-2 | |
| Multimedia Technologies/Web Design | | | | | | | | | | | | | | | | | | | | | | | | 1-2,2* | 1-2,2* | | | | | | | | | | | |
| Network Administration | | | | | | | | | | | | | | | | | | | | | | | | 1-2,2* | 1-2,2* | | | | | | | | | | | |
| Network Engineering | | | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| New Media & Web Design | | | | | | | | | | | | | | | | | | | | | | 4 | | | | | | | | | | | | | | |
| Office Technology | | | | | | | | | | | | | | | | | | | | | | | | | | | 1-2 | | | | | | | | | |
| Operating System Tech | | | | 1-2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Petroleum Engineering Technology | | 1-2* | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Petroleum Production Technology | | 1-2* | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | C |
| Software Engineering | | | | | | | | | | | | | | | | | | | | | | C,G | | 1,2,4* | 1,2,4* | | | | | | | | | | | |
| Virtual Business | | | | | | | | | | | | | | | | | | | | 4 | | | | | | | | | | | | | | | | |
| Web Development | | | | | | | | | | | | | | | | | | | | C | | | | | | | | | | | | | | | | |
| Webmaster/Web Designer/ Development & Design | | 1-2* | 1-2 | | | | | | | | | | | | | | | | | 4 | | 1-2 | 4 | | 1-2,2* | 1-2,2* | | | | | | | | | | 1-2 |

NOTES

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 | 448,740 → 681/15 → \$25,680-37,410 | Realistic | Employers may prefer persons with one or two years of postsecondary school in law enforcement. |
| Detectives and Criminal Investigators (M) Conduct investigations related to suspected violations of federal, state or local laws to prevent or solve crimes. | Police Officers, Correctional Officers | 111,930 → 353/9 → \$43,860-89,240 | 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. |
| Dispatchers (M) Send out workers, materials, and equipment as required by work settings and jobs. Dispatch buses and taxicabs in response to requests for service. Maintain a log of scheduled runs. | General Clerks | 279,410 → 1,024/67 → \$26,515-43,690 | Conventional | Must have good record keeping skills and good verbal skills. Some employers prefer high school graduates. Course work in communications and transportation may increase job opportunities. |
| Fire Chiefs (M) Supervise and coordinate activities of workers engaged in fire fighting and fire prevention and control. | Fire Fighters, Police Officers, Emergency Medical Technicians | 58,210 → 58/4 → \$47,930-74,710 | Realistic HS HW | Extensive knowledge and experience in fire fighting and investigation. Good oral and written communication skills. Must have good management skills. Not an entry level position. |
| Fire Fighters (M) Fight fires, protect lives, and property. Inspect fire-fighting equipment for serviceability. Detect fire hazards. Recommend appropriate fire prevention measures. May administer emergency first aid. | Police Officers, Emergency Medical Technicians, Fire Rangers | 304,080 → 592/21 → \$34,930-52,450 | 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 Assistants (paralegal) (M) Assist lawyers by researching legal precedent, investigating facts or preparing legal documents. Conduct research to support a legal proceeding to formulate a defense or initiate legal action. | Abstractors, Claims Examiners, Legal Secretaries | 252,250 → 308/9 → \$28,060-46,450 | 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 and Sheriff's Patrol Officers Maintain order, enforce laws and ordinances and protect life and property. May direct traffic, serve as an escort, appear in court as a witness, and render first aid. | FBI Agents, Secret Service Agents, Fish and Game Wardens, Correctional Officers | 636,410 → 1,080/42 → \$34,960-51,660 | 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. |
| Police Chiefs (M) Supervise and coordinate activities of members of police force. | Correctional Officers, Fish and Game Wardens, Police Officers | 102,040 → 213/7 → \$50,810-83,390 | Enterprising HS HW | Extensive knowledge and experience in criminal justice. Good oral and written communication skills. Larger cities prefer a graduate degree. Must have good management skills. Not an entry level position. |
| Security Guards (M) Guard, patrol or monitor premises to prevent theft, violence or infractions of rules. | Border Guards, Correctional Officers, Fish and Game Wardens | 1,032,940 → 1,584/44 → \$19,540-29,690 | 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 Attorneys, Judges | 570,950 → 1,316/38 → \$50,260-108,530 | 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. |

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|------|-----|------|-----|-----|------|------|-----|-------|------|----|-------|--------|-----|------|----|-----|------|-----|------|------|-------|------|-----|-----|-----|-----|-----|-----|------|------|----|-----|-----|------|-----|
| BICC | BSC | CCCC | DCB | DSU | EATC | FBCC | FFS | GFKFS | HAHD | JC | JSHDF | JSHDGF | JZT | LRSC | LW | MIL | MaSU | MBC | MISU | MOGN | NDSCS | NDSU | PAR | RCB | RCF | SBC | TBC | THA | TMCC | TSPA | UM | UND | UTC | VCSU | WSC |
|------|-----|------|-----|-----|------|------|-----|-------|------|----|-------|--------|-----|------|----|-----|------|-----|------|------|-------|------|-----|-----|-----|-----|-----|-----|------|------|----|-----|-----|------|-----|

| LAW, PUBLIC SAFETY, CORRECTIONS & SECURITY | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|------|---|--|--|--|--|--|--|--|--|---|--|--|---|---|---|--|--|--|--|----|----|----|------|------|---|-----|--|--|--|---|----|---|---|----|--|
| Criminal Justice/Studies | 2-4* | A | | | | | | | | | 4 | | | | A | | | | | | 4G | A | 4G | 2,4* | 2,4* | 2 | | | | | 4 | 4G | 2 | A | | |
| Emergency Management | | | | | | | | | | | | | | | | | | | | | | A | 4G | | | | | | | | | | | | | |
| Fire Technology | 1-2* | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Forensic Psychology | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | G | | |
| Forensic Science | | | | | | | | | | | | | | | | M | | | | | | | | | | | | | | | | | | 4 | | |
| Indian Law | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | C | |
| International Infectious Disease Management & Biosecurity | | | | | | | | | | | | | | | | | | | | | | GC | | | | | | | | | | | | | | |
| Law (J.D.) | | | | | | | | | | | | | | A | | | | | | | | A | | | | | | | | | | | G | | A | |
| Law Enforcement | | | | | | | | | | | | | | 2 | | | | | | | | A | | | | | | | | | | | | | | |
| Paralegal/Legal Assistant | | | | | | | | | | | | | | 2 | | | | | | | | A | | | 2 | | 1-2 | | | | | | | | | |
| Peace Officer | | | | | | | | | | | | | | 1 | | | | | | | | | | | | | | | | | | | | | | |
| Police Management & Investigation | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Public Health | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | GC | |
| Private Security Officer | | | | | | | | | | | | | | 1 | | | | | | | | | | | | | | | | | | | | | | |

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 | | | | |
| 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 | 149,910 → 420/12 → \$16,890-25,500 | 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. |
| 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 | 81,260 → 381/16 → \$25,350-39,110 | 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 | 71,890 → 449/20 ↗ \$31,320-47,510 | 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. |
| Dental Laboratory Technicians (M) Construct and repair full or partial dentures or dental appliances. | Orthotics and Prosthetics Technicians, Opticians | 37,600 → 177/9 → \$24,470-37,030 | 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. |
| Electrical and Electronic Engineering Technicians (M) Apply electrical and electronic theory and related knowledge to design, build, test, and modify electrical or electronic equipment. Work under direction of electrical or electronic engineer. | Broadcast Technicians, Bio-Medical Equipment Technicians | 150,020 → 304/12 → \$43,850-66,180 | 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. |
| Electro-Mechanical Technicians Operate, test and maintain unmanned, automated, servo-mechanical or electro-mechanical equipment. May assist engineers with robotics equipment. | Electronics Technicians, Mechanical Engineering Technicians | 16,620 → NA/NA \$33,090-75,390 US | 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. |
| Energy Industry Manager (Managers of Production and Operating Workers) Plan, direct or coordinate operations of energy facilities. Duties and responsibilities include formulating policies, managing daily operations and planning the use of materials and human resources. | Plant Managers, Production Supervisors | 559,350 → 1,384/50 ↗ \$34,990-63,820 | 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. |
| 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, Machinists | 408,180 → 1,208/79 ↗ \$37,120-42,762 | Realistic HS ☀️ | Completion of a formal apprenticeship program often required. Openings filled by employees within an industry based on seniority and past experience. Not an entry level position. |
| Machinists (M) Set up and operate a variety of machine tools to produce precision parts and instruments. | Blacksmiths, Gunsmiths, Locksmiths, Welders | 368,510 → 647/28 ↗ \$29,120-45,200 | 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. |
| Mechanical Engineering Technicians Develop and test machinery and equipment. Review blueprints. Draft detail drawings. Assemble modified mechanical components. Work directly under a mechanical engineer. | Drafters, Mechanical Engineers | 44,760 → 95/4 ↗ \$33,730-52,420 | 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. |
| Process Plant Operator (Chemical Plant and System Operators) Operate, control or maintain process facility to create various types of fuel, food products, or any other product requiring processing. | Process Technicians, Process Operators, Plant Operators, Operations Technicians | 40,580 ↘ NA/NA \$34,430-74,480 US | 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. |
| Tool and Die Makers (M) Make and repair custom-made tools, dies, jigs, fixtures, or gauges. Study blueprints, compute dimensions, and plan layout when fitting and assembling work pieces. Set up and operate tools to machine parts to specifications. | Machinists, Instrument Makers, Millwrights, Gunsmiths | 70,320 ↘ 82/1 ↗ \$38,170-56,200 | 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. |
| 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 | 316,290 → 2,123/113 ↗ \$30,800-47,850 | 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. |

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 | | | | |
| Auctioneers Sell articles at auction to the highest bidder, decide value of items, describe merchandise, and select the order of the items to be sold. Closes sale to the highest bidder. May write advertising copy. | Real Estate Agents, Appraisers, Sales Representatives: All Other | 596,480 → NA/NA \$26,770-70,740 | Enterprising HW | Must have a diploma from an accredited school and be licensed and bonded. Training for this occupation is a two-week program of coursework and practicum. Many are self-employed or employed part-time as auctioneers. |
| Barbers Shampoo, color, cut, perm, and style hair using clippers, comb, curling iron, blow dryers, and scissors. May offer scalp treatments, facial, face massages, and shaves. License required. | Estheticians, Cosmetologists, Makeup Artists, Manicurists | 10,430 → 127/2 → \$16,960-45,410 US | Realistic HS HW | Must complete a designated training program. Those who are versatile and able to work with many different styles and cuts have the best opportunities for employment. License required. |
| Butchers and Meat Cutters (M) Cut, trim or prepare consumer-sized portions of meat for use or sale in retail establishments. | Bakers, Cooks, Kitchen Supervisors | 130,720 → 591/20 → \$19,950-28,480 | Realistic HS | Preference is given to high school graduates. Ability to communicate with the public and strength is required to move and lift heavy pieces of meat. Hired by grocery and meat markets. |
| Buyers and Purchasing Agents Purchase merchandise or commodities for resale or processing. Inspects and grades or appraises agricultural commodities, durable goods, apparel, furniture, livestock, or other merchandise offered for sale to determine value and yield. | Sales Representatives, Retail Sales Workers, Sales Managers | 380,150 → 795/31 → \$33,795-61,445 | 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 and Checkers (M) Receive and disburse money in establishments other than financial institutions. Use electronic scanners, cash registers or related equipment. | Bank Tellers, Post Office Clerks, Sales Clerks | 3,314,870 → 11,562/619 → \$16,980-19,360 | 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 | 420,070 → 1,549/71 ↗ \$17,140-24,900 | 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 | 1,782,800 → 4,220/105 ↘ \$17,030-27,020 | Conventional | Many employers prefer high school graduates. Must be able to read and write legibly and perform simple arithmetic. Additional skills acquired through on-the-job training. |
| Cosmetologists and Hairstylists Cut, style, color and perm hair. Advise patrons on how to care for their hair. May suggest cosmetics for skin conditions. Give manicures, facials, and scalp treatments. | Estheticians, Barbers, Manicurists | 357,030 → 1,743/56 → \$17,040-31,680 | Enterprising HS ☀ | Must complete a state approved training program. Must be willing to work weekends and evenings and stand for long periods of time. It may take some time to build up a clientele. License required. |
| Funeral 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. | Embalmers, Funeral Attendants, Counselors | 29,760 → 138/6 → \$42,420-85,000 | Enterprising HS HW | An associate's degree is required prior to one 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. |
| Property and Real Estate Managers Manages apartments and office complexes, buys and sells real estate. Shows property to clients, arranges loans, and signs lease payments and sales contracts. | Restaurant Managers, Education Administrators, Real Estate Appraisers | 152,380 → 411/12 → \$33,080-73,090 | 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. |
| 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 | 368,000 → 831/27 → \$18,940-43,450 | Enterprising HS ☀ | Must pass a written exam to become a sales agent. Works under the direction of a licensed broker. Broker must be licensed and must have completed 90 hours of real estate coursework and have two years real estate sales experience. May be self-employed. |
| Retail Florist (Floral Designer) Design, cut and arrange live, dried or artificial flowers or foliage. | Retail Salespersons, Store Managers, Horticulturists | 47,180 ↘ 258/8 ↘ \$16,630-22,490 | Artistic | Some employers prefer or require technical training. Must like working with flowers and plants. Long hours at holidays. |

MARKETING

| Occupational Title/Description | Related Occupations | Nat'l Employment | Holland Type | |
|--|--|--|--------------------------|--|
| | | ND Employment/ Proj. Openings | Rating | Hiring Practices |
| | | ND Earnings | | |
| Retail Store Managers (M) Manage retail store engaged in selling various merchandise. Plan and prepare work schedules, formulas, and pricing policies. Coordinate sales activities and supervise employees in a retail store. | Restaurant Managers, Personnel Directors | 1,197,390 → 3,875/128 → \$23,950-43,130 | Enterprising HS ☀️ | Some employers prefer a four-year degree, others require career and technical education training. Experience may increase job opportunities. Some managers are hired through internal promotion. |
| Sales Agent, Advertising Sell or solicit advertising, including graphic art, advertising space in publications, custom made signs or TV/radio advertising time. | Insurance Agents, Real Estate Agents, Public Relations Workers | 144,760 → 566/17 ↘ \$21,870-53,450 | 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. |
| 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 | 1,765,980 → 4,138/185 ↗ \$30,650-78,790 | Enterprising HW ☀️ | Employers prefer formal training in marketing, sales, or business, others may hire high school graduates and train them over a two-year period. Hired by manufacturers. |
| 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 | 387,950 → 1,615/73 ↗ \$17,870-34,980 | Enterprising ☀️ | Driver's license required. Preference is given to persons who have a good driving record, are good sale persons, and display a neat appearance. |
| Salespersons, Parts Sell spare and replacement parts and equipment in repair shop of parts store. | Auto Mechanics, Sales Representatives | 208,800 → 1,278/76 ↗ \$23,850-38,880 | Enterprising ☀️ | Many parts salespeople are trained on the job. They first may work as stock clerks before moving up to parts sales. Knowledge of automotive mechanics or electricity may increase job possibilities. |
| Salespersons, Retail Trade Sell merchandise, such as furniture, cars, appliances and apparel in a retail store. | Sales Route Drivers, Real Estate Agents, Insurance Agents | 4,270,550 → 11,924/546 → \$17,020-33,240 | 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. |

Postsecondary Programs – Bachelors Degree or More

| | | | | |
|---|---|---|-----------------------------|--|
| Interior Designers Plan, design and furnish interiors of residential, commercial or industrial buildings. Formulate design which is practical, aesthetic and conducive to intended purposes. | Floral Designers, Fashion Designers | 40,950 → 58/3 ↗ \$23,760-38,790 | Artistic HS | Many employers prefer a bachelor's degree plus experience. Must be able to work with clients, and sell merchandise. Artistic talent is crucial. Work for rental firms or may be self-employed. |
| Marketing Managers Determine demand for products and services offered by a business and its competitors and identify potential customers. Develop pricing strategies to maximize profits or share of market. | Advertising Managers, Sales Managers, Public Relations Managers | 168,410 → 253/12 → \$56,390-104,350 | Enterprising HS HW ☀️ | College graduates with related experience, high level of creativity and strong communication skills needed. Keen competition for jobs expected. |
| Sales Managers Direct distribution of product or service to the customer, establishing sales territories, quotas and goals. Analyze sales statistics. | Public Relations Managers, Marketing Managers | 328,230 → 751/34 → \$49,100-107,130 | Enterprising HS HW ☀️ | College graduates with related experience, high level of creativity and strong communication skills needed. Keen competition for jobs expected. |

BICC
BSC
CCCC
DCB
DSU
EATC
FBCC
FFS
GFKFS
HAHD
JC
JSHDF
JSHDGF
JZT
LRSC
LW
MIL
MaSU
MBC
MiSU
MOCN
NDSCS
NDSU
PAR
RCB
RCF
SBC
TBC
THA
TMCC
TSPA
UM
UND
UTC
VCSU
WSC

| MARKETING | BICC | BSC | CCCC | DCB | DSU | EATC | FBCC | FFS | GFKFS | HAHD | JC | JSHDF | JSHDGF | JZT | LRSC | LW | MIL | MaSU | MBC | MiSU | MOCN | NDSCS | NDSU | PAR | RCB | RCF | SBC | TBC | THA | TMCC | TSPA | UM | UND | UTC | VCSU | WSC | | |
|----------------------------------|------|-----|------|-----|-----|------|------|-----|-------|------|----|-------|--------|-----|------|----|-----|------|-----|------|------|-------|------|-----|------|------|-----|-----|-----|------|------|----|-----|-----|------|------|--|--|
| Advertising and Marketing | | | | 1-2 | | | | | | | 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Apparel, Merchandising, & Design | | | | | | | | | | | | | | | | | | | | | | | 4 | | | | | | | | | | | | | | | |
| Barbering | | | | | | | | | | | | | | | | | | 1 | | | | | | | | | | | | | | | | | | | | |
| Cosmetology | | | | | | | | | 1-2 | | | 1 | 1 | 2 | | | | | | | | | | | | | | 1 | | 1 | | | | | | | | |
| Esthetician/Skin Care | | | | | | | | | | | | 1 | 1 | | | | | | | | | | | | | | | | | 1 | | | | | | | | |
| Interior Design | | | | | | | | | | | | | | | | | | | | | | | 4 | | | | | | | | | | | | | | | |
| Marketing & Sales | | | | | | | | | | | | | | | | | | | | | | | | | 1-2, | 1-2, | | | | | | | | | | | | |
| Marketing/Marketing Management | | | | | | | | | | | 4 | | | | 1-2 | M | | | 4 | | | 2 | C | | | | | | | | | 4 | 4 | | | 1-2A | | |
| Merchandising | | | | | | | | | | | | | | | | | | | | | | | C,G | | | | | | | | | | | | | | | |
| Nail Technology/Manicurist | | | | | | | | | | | | | 1 | 1 | | | | | | | | | | | | | | | | 1 | | | | | | | | |
| Social Entrepreneurship | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | C | | | |

NOTES

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 | | | | |
| 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 Technicians, Forestry Technicians, Environmental Science Technicians | 72,140 → NA/NA \$22,800-37,480 | Realistic HS | Most employers prefer applicants with at least two years of specialized training. Must have aptitude for math and science and enjoy technical work. Ability to work with detail necessary. Work under the direction of experienced scientists. Hired by laboratories. |
| Chemical Technicians (M) Conduct chemical tests making qualitative and quantitative analysis. May work in the area of criminology, environment, or health. May analyze foods, drugs, dyes, paints, detergents, petroleum, and other products. | Medical Laboratory Technicians, Medical Laboratory Technologists | 59,650 → 276/10 ↗ \$28,640-54,940 | 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. |
| Simulator Maintenance Technician (M) Troubleshoot, repair, and maintain the electronic, visual, and mechanical components of simulator trainers used in pilot training. They analyze simulator malfunctions, using appropriate tools and technical data, to determine and correct system failures. | Electronic Repair Technicians, Computer Repairers, Bio-Medical Equipment Technicians | 150,020 → 304/12 → \$33,090-66,180 | Realistic HS HW ☀️ | Employers require two years of career and technical education training. Must have ability to do detail work with a high degree of accuracy. Verbal and written communication skills are very important. Good eyesight and color discrimination necessary. Work for airlines and aerospace manufacturers. |
| 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, Geotechnicians, Map Editors, GIS Technicians | 48,590 → 221/9 ↗ \$28,280-44,530 | 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 | | | | |
| 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 | 80,040 → 73/3 → \$43,640-79,980 | 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. |
| 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 Technicians, Land Surveyors, Animal Scientists, Mechanical Engineers | 2,650 → 53/2 → \$48,780-76,370 | 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. |
| Engineers, Chemical Develop processes for manufacturing chemicals. Design equipment and test methods of manufacturing the products. May specialize in preventing pollution, or refining oil and metal. | Chemists, Engineers (Aeronautical, Civil, Mechanical), Chemical Engineering Technicians, Biochemists | 27,860 → NA/NA \$68,270-129,460 | 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. |
| 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 Technicians | 254,130 → 900/46 ↗ \$48,490-79,540 | 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. |
| 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 Engineers, Electrical Engineering Technicians | 154,250 → 265/11 → \$56,740-86,300 | 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. |
| Engineers, Energy Design, develop, and evaluate energy-related projects and programs to reduce energy costs or improve energy efficiency during the designing, building, or remodeling stages of construction. | Architects, Engineers (Chemical, Civil, Electrical, Mechanical) | 125,590 → NA/NA \$46,930-99,190 | Investigative HS HW | Employers generally prefer applicants with a graduate degree. Employed by federal and private research laboratories, universities, and power companies. |
| Engineers, Industrial (M) Design and develop ways for an organization to use people, machines, and materials, consider product quality, production costs, and worker safety. May specialize in processing systems design, cost control, or safety. | Safety Engineers, Mechanical Engineers, Industrial Engineering Technicians | 211,490 → 506/25 ↗ \$51,920-82,280 | 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. |
| 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), Drafters, Mechanical Engineering Technicians | 238,260 → 365/21 ↗ \$50,310-81,760 | Realistic HS HW ☀️ | Most mechanical engineers are employed in manufacturing. Some work for government agencies, educational institutions, and private firms. Drafting and design experience helpful. May be licensed. |

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 Control Specialists (M) Control air traffic on and within vicinity of airport and movement of air traffic between altitude and control sectors, according to established procedures and policies. Authorize and control commercial airline flights. | Airline-Radio Operators, Airplane Dispatchers, Pilots | 23,580 ↘ 172/8 → \$59,750-93,060 | 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 | 117,320 → 261/16 ↗ \$34,140-56,010 | 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 Detailers | 144,730 → 660/26 → \$19,930-37,535 | 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 | 589,750 → 2,379/100 → \$23,890-45,680 | Realistic HS HW ☀️ | 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 (M) Drive bus or motor coach, including regular route operations, charters and private carriage. | Truck Drivers, Taxi Drivers | 176,190 → 182/8 → \$22,790-31,100 | Realistic | Ability to work with people improves chances for employment. A good driving record is essential. Must be licensed. Hired by school and private transit systems. |
| Diesel Mechanics/Bus and Truck Mechanics (M) Diagnose, adjust, repair or overhaul trucks, buses and all types of diesel engines. | Autobody Repairers, Auto Mechanics, Aircraft Mechanics | 222,940 → 1,329/81 ↗ \$31,120-48,590 | 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. |
| Drivers, Truck (M) Operate trucks, tractor-trailers and similar vehicles powered by gasoline or diesel engines. Travel short or long distances to transport goods and materials. | Bus Drivers, Chauffeurs, Taxi Drivers | 2,279,830 → 11,910/902 ↑ \$25,285-42,525 | Realistic ☀️ | Employers prefer high school graduates. Ability to judge distances accurately, to operate safely and efficiently, and to prepare delivery forms and other driving records is essential. Must be able to work with little supervision. |
| Farm Equipment Mechanics Diagnose, adjust, repair or overhaul farm machinery and vehicles, such as tractors, harvesters and related equipment. | Auto Mechanics, Diesel Mechanics, Machinists, Welders | 32,100 → 632/38 ↗ \$28,620-41,930 | Realistic ☀️ HS | Prefer high school graduate with past experience, career and technical education, or apprenticeship training. Farm background an advantage. |
| Flight Attendants, Airplane (M) Greet passengers, verify tickets and help locate seats, serve meals and beverages. Observe passengers to detect signs of discomfort. | Gate Agents, Hosts/Hostesses | 87,190 ↘ NA/NA \$24,990-62,470 US | Enterprising HS HW | Preference is given to those with two years of college or experience dealing with the public. Must have excellent health, good vision, and good communication skills. Fluency in foreign language necessary for overseas travel. |
| Heavy Equipment Mechanics (M) Repair and service a wide variety of construction and mining equipment. Diagnose, disassemble, replace parts and assemble, recondition, align, fit and reassemble equipment. | Diesel Mechanics, Aircraft Mechanics, Auto Mechanics | 109,810 → 919/64 ↑ \$35,630-54,980 | 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. |
| Mail Carriers (M) Sort mail for delivery. Deliver mail on established route by vehicle or on foot. | Delivery-Route Truck Drivers, Newspaper Carriers | 315,330 ↘ 843/28 → \$38,860-52,500 | 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 Inspectors, Postal Workers | 24,410 ↘ 293/6 ↘ \$28,070-55,760 | Enterprising HS HW | Postmasters are appointed from within the postal service. Appointees should have good communication, managerial and finance coordination skills and demonstrate initiative. |
| Small Engine Mechanics (M) Service and repair lawn mowers, chain saws, outboard motors, and motorcycles. May adjust clutches and brakes. Provide tune-ups. May rebuild entire engine. | Aircraft Mechanics, Auto Mechanics, Motorcycle Mechanics | 58,390 → 188/9 → \$24,286-36,890 | 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. |
| Postsecondary Programs – Bachelors Degree or More | | | | |
| Airplane Pilots (M) Fly planes and helicopters to transport passengers, mail, or freight or for other commercial purposes. Use radar, compasses and direct vision. May spray crops. May test new aircraft. | Air Traffic Controllers, Helicopter Pilots | 99,980 → 70/4 ↗ \$32,890-62,750 | 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, DISTRIBUTION & LOGISTICS

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

NOTES



ENERGY:

HIGH-PAYING, LIFE-LONG CAREERS

Companies across North Dakota and the entire world are looking for qualified people to fill their positions!

What kind of work is it?

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

What should I expect as an employee in the industry?

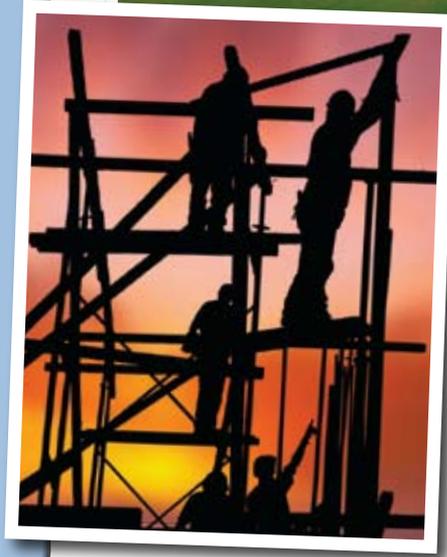
- Working in various temperatures, heights and spaces
- Working days, nights, weekends and holidays in shift hours
- Ability to pass random drug testing

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 – lisc.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

Where can I work?

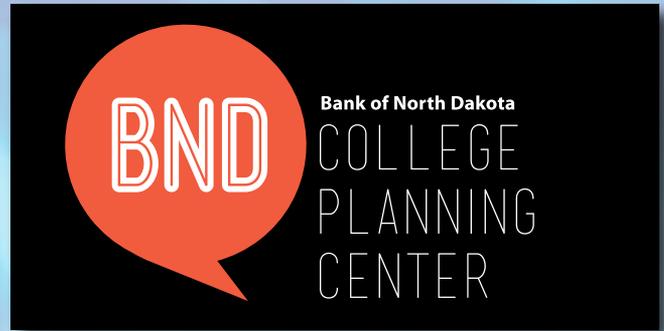
- Natural Gas Facilities
- Petroleum Production Companies
- Electric Cooperatives
- Utility Companies
- Power Plants
- Wind Farms
- Solar Facilities
- Ethanol & Biodiesel Plants
- Water Treatment Plants
- Maintenance Contracting Companies
- Nuclear Plants
- Food Processing Plants



From the *Cradle* to a **CAREER**

Bank of North Dakota's College Planning Center helps parents and students of all ages plan for college. Visit the website banknd.nd.gov to learn what to do to take the next step toward a college education.

Besides being a **free** service, here are some of the benefits, opportunities, and information provided through Bank of North Dakota's College Planning Center:



CRASH COURSES:

- An event where students in grades 7-12 and their families can learn financial aid and FAFSA information along with other topics such as job opportunities, exploring interests with RUReadyND.com, scholarships, and college planning.
- Held in host communities and includes towns within 30 miles of each host community.
- A free meal is provided for students and their parents.
- Prizes will be given away.
- Visit www.banknd.nd.gov for locations, dates, and times.
 - More information on Crash Course times and dates will be made available in the spring of 2013.

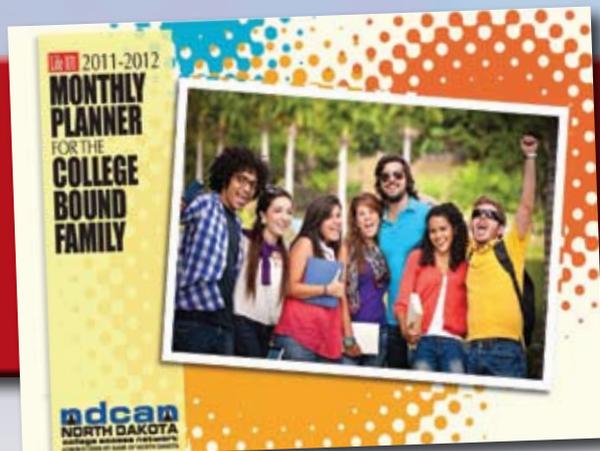
SCHOLARSHIPS:

- Find school specific scholarships and Native American opportunities.
- Access the Dual Credit Assistance application.
- Search many other online scholarship sites in one location.

PAYING FOR COLLEGE:

- Find where to get help completing the FAFSA.
- Discover how to pay for college.
- Learn about College SAVE™.
- Save more with Education Tax Benefits.

COLLEGE AND CAREER PLANNING:



College **SAVE**™
Picture the Future

- Start with Bank of North Dakota's College Planning Center to access tools and information to help you make informed decisions on which school and career are right for you.
- Read [College Bound Calendar](#) for tips on what to do each month to prepare for college.
- Check out [Life 101](#) magazine to find out where your favorite star went to college.

NEED MONEY FOR COLLEGE? FAFSA CAN HELP.

Where and How Do I Fill Out the Forms?

- Apply for admission to the campus(es) of your choice.
- Fill out the FREE Application for Federal Student Aid (FAFSA).
 - To maximize your aid potential fill your FAFSA out as soon after January 1 as possible.
- The FAFSA is free and can be obtained at your high school guidance counselor's office, the college admission or financial aid office, or on-line at www.fafsa.ed.gov.
- Gather all of your federal tax return information (you will need this information to complete the FAFSA), keep copies of everything you submit and be sure to clearly indicate which school(s) should receive your financial information.
- Receive your Student Aid Report (SAR).
 - Once your FAFSA is processed, you will receive the SAR which is a summary of the information you submitted on your FAFSA.
 - Check your SAR for accuracy and make changes if necessary.
- Receive an Award Letter.
 - The school(s) you chose will use your FAFSA information to determine the amount and type of aid it can offer to you. This information will be outlined in an Award Letter which is usually sent out in late spring or early summer.

Need More Help Filling Out the Forms?

- Attend College Goal Sunday.
 - College Goal Sunday is free event where prospective college students and their families will receive help in completing the FAFSA.



This program is coordinated by the North Dakota Association of Student Financial Aid Administrators through grant funding from Lumina Foundation for Education. For more information and a list of locations visit www.collegegoalnd.org or call 866-454-3308.

Where Can I Get Additional Financial Aid?

- Seek out scholarships.
 - You may find scholarship opportunities at local businesses and organizations, a library, colleges and universities, religious organizations, fraternal organizations, employers, tribal agencies and state agencies.
 - The internet can be another great source for scholarship information.

What Are the Deadlines?

- The priority FAFSA deadline in North Dakota is April 15th.
- Deadlines for admissions, applications and required tests may vary from school to school so make sure to contact your school for all deadline information.

How Much Can I Get?

- There are several factors which can determine how much aid you are eligible to receive.
 - Grade level
 - Family size
 - Income and assets
- The Financial Aid Office at your school will use the FAFSA and other information to determine your eligibility and need for financial aid.
- Financial Aid can include:
 - Scholarships
 - Grants
 - Loans
 - Work Study jobs

How Much Should I Borrow?

- Estimate what your income will be after college.
 - This information can be found in this publication - see pages 19-52.
- Your total student loan payments should not exceed 10 percent of your income.



MAJOR SOURCES OF FINANCIAL AID

Grants:

(Money awarded which does not need to be repaid)

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

Loans:

(Must be repaid with interest or sometimes service)

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

Scholarships:

(Generally based on achievement)

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

Work:

| | | | |
|-------------------------|---|--|---------------|
| Federal Work Study..... | X | | Federal/State |
|-------------------------|---|--|---------------|

“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. High school students can get a head start on college by enrolling in college credit classes. 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

- The letter grade received in the course is the same and is posted on both high school and college transcripts.
- The college transcripts will not differentiate between college courses taught on campus and those taught to high school students as dual credit courses.
- Students and parents can save on the immediate and long-term costs of a college education.
- Students can ease into college classes in a comfortable, familiar environment with smaller class sizes.
- Successful completion of a dual credit class can fulfill one of the requirements of the North Dakota Academic Scholarship.
- Completion of some college credits while in high school increases the likelihood of completing a college degree.



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 high school diplomas 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

Distance Education in ND

The North Dakota University System (NDUS) has made access to a college education easier than ever. For years, NDUS has offered college courses for credit through a variety of delivery methods such as online, IVN, and correspondence (just to name a few) to make earning your college education as convenient as possible.

The NDUS offers more than 120 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.

For more information about these opportunities, go to www.ndus.nodak.edu/students/online-courses-degrees. If you are considering taking a distance education course from a college other than a University System institution, do your homework first. Please make sure the college is a legitimate accredited institution and not a degree mill.



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! Please see the admission requirements below to help you find the school that is the best fit for you and your goals.

2-year college admission requirement:

- A beginning freshman applicant who is a high school graduate may be admitted to any two-year campus. Each campus does have the right to 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 requirement:

- 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.

Additional courses may be required before you can be admitted to some college programs. Your school counselor or college admissions representative can tell you more about specific requirements for the programs that interest you.

Planning to Transfer

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 select "Easy Transfer within or to North Dakota Campuses."** You can also call the North Dakota Director of Articulation and Transfer at 701-858-3494.





Why Choose a North Dakota Campus?

- **Relevant!** You can find a North Dakota college to meet your needs.
- **Peace of mind!** You can live and learn in a safe, secure environment.
- **Lifestyle!** You can participate in extracurricular activities and organizations.
- **Quality!** North Dakota colleges have nationally recognized programs of study.
- **Skills!** These programs will prepare you for a successful career.
- **Jobs!** North Dakota has more jobs than we have people to fill them.
- **Investment!** Invest in yourself and North Dakota...a perfect combination!

Checklist for Admission to a College or University

- Select more than one campus for consideration.
- Request college catalogs and/or visit each campus website.
- Make appointments to tour the selected campuses (contact admissions office).
- Take the ACT – colleges can provide testing 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.
- Contact each institution's financial aid office to apply for financial aid and scholarships.
- Prepare parent and student (if applicable) income tax forms as soon as possible after January 1, 2013, for use in completing the Free Application for Federal Student Aid (FAFSA) form.
- Complete the 2013-14 FAFSA form to apply for federal and state grants and loans. The NDUS priority FAFSA deadline is April 15.
- Consider applying for institutional and private scholarships at each selected institution.
- Weigh your options, including financial aid packages, and select a college or university.
- Attend the college or university's orientation session.
- Get ready for the experience of a lifetime.

NORTH DAKOTA: 2012-2013 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 |
|------------|---|--|--|--|------------------------|------------------|-----------------------|----------|
| 002988 | Bismarck State College www.bismarckstate.edu | PO Box 5587 Bismarck ND 58506 | 701-224-5494 800-445-5073 | 701-224-5429 800-445-5073 | \$3,998 ¹ | \$1,000 | \$5,758 | \$10,756 |
| 015793 | 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 | \$5,750 | \$9,750 |
| 002995 | Dakota College at Bottineau www.dakotacollege.edu | 105 Simrall Blvd Bottineau ND 58318 | 701-228-5437 800-542-6866 | 701-228-5426 800-542-6866 | \$3,887 | \$1,100 | \$4,907 | \$9,894 |
| 002989 | Dickinson State University www.dickinsonstate.edu | 291 Campus Drive Dickinson ND 58601 | 701-483-2371 800-279-4295 | 701-483-2175 800-279-4295 | \$5,718 ² | \$1,100 | \$5,198 | \$12,016 |
| 015536 | 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 |
| 041394 | The Hair Academy www.thehairacademynd.com | 2101 E Broadway Ave Bismarck ND 58501 | 701-255-3547 800-793-9594 | 701-255-3547 800-793-9594 | \$9,720 | \$1,399 | \$10,270 ³ | \$21,389 |
| 016232 | Headquarters Academy of Hair Design | 108 S Main Street Minot ND 58701 | 701-852-8329 800-891-5135 | 701-852-8329 800-891-5135 | \$10,800 | \$353 | \$8,880 ³ | \$20,033 |
| 012295 | 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 | \$14,295 | \$1,800 | \$11,902 ³ | \$27,997 |
| 002990 | Jamestown College www.jc.edu | 6085 College Lane Jamestown ND 58405 | 701-252-3467 Ext. 5556 | 701-252-3467 Ext. 5562 800-336-2554 | \$17,870 | \$1,000 | \$6,030 | \$24,900 |
| 007756 | Josef's School of Hair Design, Inc. www.jsohd.com | 627 NP Avenue Fargo ND 58102 | 701-235-0011 800-201-0012 | 701-235-0011 800-201-0012 | \$13,100 | \$735 | \$7,700 ³ | \$21,535 |
| 010406 | Josef's School of Hair Design, Inc. www.jsohd.com | 2011 S Washington Grand Forks ND 58201 | 701-772-2728 800-201-0012 | 701-772-2728 800-201-0012 | \$13,100 | \$735 | \$7,700 ³ | \$21,535 |
| 010406-02 | 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 | \$1,000 | \$7,700 ³ | \$25,900 |
| 002991 | Lake Region State College www.lrscc.edu | 1801 College Dr N Devils Lake ND 58301 | 701-662-1517 800-443-1313 | 701-662-1514 800-443-1313 | \$3,908 | \$1,000 | \$5,046 | \$9,954 |
| 002993 | Mayville State University www.mayvillestate.edu | 330 3rd Street NE Mayville ND 58257 | 701-788-4767 800-437-4104 | 701-788-4667 800-437-4104 | \$6,193 ⁴ | \$1,000 | \$5,790 | \$12,983 |
| 009354 | Medcenter One College of Nursing www.medcenterone.com/collegeofnursing | 512 N 7th Street Bismarck ND 58501 | 701-323-6270 | 701-323-6271 | \$11,167 | \$1,179 | \$5,949 | \$18,295 |
| 002994 | Minot State University www.minotstateu.edu | 500 University Ave W Minot ND 58707 | 701-858-3375 800-777-0750 | 701-858-3350 800-777-0750 | \$5,921 | \$1,000 | \$5,381 ⁵ | \$12,302 |
| 016929 | Moler Barber College of Hairstyling | 16 S 8th Street Fargo ND 58103 | 701-232-6773 | 701-232-6773 | \$5,480 | \$855 | \$5,335 ³ | \$11,670 |
| 002996 | North Dakota State College of Science www.ndscs.edu | 800 N 6th Street Wahpeton ND 58076 | 701-671-2207 800-342-4325 Ext. 32207 | 701-671-2521 800-342-4325 Ext. 32521 | \$4,177 ⁶ | \$1,000 | \$5,164 | \$10,341 |
| 002997 | North Dakota State University www.ndsu.edu | PO Box 6050 Dept 5240 Fargo ND 58108 | 701-231-6200 866-924-8969 | 701-231-8643 800-488-6378 | \$7,234 | \$1,100 | \$7,104 | \$15,438 |
| 004846 | Rasmussen College www.rasmussen.edu | 1701 E Century Ave Bismarck ND 58503 | 701-530-9600 877-530-9600 | 701-530-9600 877-530-9600 | \$13,500 ⁷ | \$0 | \$5,216 ³ | \$18,716 |
| 004846 | Rasmussen College www.rasmussen.edu | 4012 19th Ave SW Fargo ND 58103 | 701-277-3889 800-817-0009 | 701-277-3889 800-817-0009 | \$13,500 ⁷ | \$0 | \$5,216 ³ | \$18,716 |
| 040313 | 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 | \$14,290 | \$1,415 | \$11,074 ³ | \$26,779 |
| 014993 | Sitting Bull College www.sittingbull.edu | 9299 Highway 24 Fort Yates ND 58538 | 701-854-8000 701-854-8013 | 701-854-8020 | \$3,910 | \$1,200 | \$4,050 | \$9,160 |
| 012059 | Trinity Bible College www.trinitybiblecollege.edu | 50 S 6th Avenue Ellendale ND 58436 | 888-822-2329 | 888-822-2329 | \$13,440 | \$1,000 | \$5,300 | \$19,740 |
| 009450 | 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 |
| 002992 | University of Mary www.umary.edu | 7500 University Dr Bismarck ND 58504 | 701-255-7500 800-288-6279 | 701-255-7500 | \$14,040 | \$1,160 | \$5,218 ⁸ | \$20,418 |
| 003005 | University of North Dakota www.und.edu | 264 Centennial Dr Stop 8371 Grand Forks ND 58202 | 701-777-3121 800-CALLUND | 701-777-3821 800-CALLUND | \$7,254 | \$1,000 | \$6,332 ² | \$14,586 |
| 014470 | United Tribes Technical College www.uttcc.edu | 3315 University Dr Bismarck ND 58504 | 701-255-3285 Ext. 1463 | 701-255-3285 Ext. 1256 | \$3,840 | \$1,400 | \$2,660 | \$7,900 |
| 003008 | Valley City State University www.vcsu.edu | 101 College St SW Valley City ND 58072 | 701-845-7412 800-532-8641 | 701-845-7101 800-532-8641 | \$6,334 ^{1,4} | \$1,100 | \$5,454 | \$12,888 |
| 003007 | Williston State College www.willistonstate.edu | PO Box 1326 Williston ND 58802 | 701-774-4248 888-863-9455 | 701-774-4210 888-863-9455 | \$4,182 ¹ | \$1,100 | \$7,370 ⁸ | \$12,652 |

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, 7 day plan.
- 6 Based on 16 credits per term.
- 7 Based on 12 credits per term.
- 8 Contact campus housing for actual costs.
- 9 Based on 14 credits per term.



It's Time to Think about Searching for a **JOB**



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

Make the Switch

It is time to make the switch from student to adult. What does that mean? Check your voicemail message, edit your social networking sites and make sure they give the impression of the professional image that you would like to project. What you post on a social network site is public domain and can be read by anyone anywhere. Your personal photo and information posted could be used against you by potential employers who routinely search new hire candidates. Employers screen for explicit photos and unprofessional comments on social networking websites. Remember, you cannot control content that your friends might post about you. 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 Prepared

You should have an up-to-date, basic resume ready at all times, along with a master copy of a general application form. You will be able to target your resume for each job you apply for by comparing the description of the job to your qualifications. Have a master cover letter that can be targeted to each job to accompany your resume. Have copies of your letters of recommendation ready and don't forget to check with your references in advance so they know to expect those phone calls.

Get Help

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

Be Thorough

Exhaust all possibilities when searching for the next job. In addition to JSND, try using search engines to explore the company's website to learn as much about the company as you possibly can and don't forget to network. Many job openings are not advertised so tell everyone you know that you are looking for work. Networking is one of the most successful ways to find a job.

Save Time

Can't find the time to get it all done? Consider hiring someone to help with your resume and/or applications. It can save you hours of time and assure a professional product. Ask for samples of their work and be aware of what the charges will be and decide whether or not it is a service you can afford. Give them solid information about you so you can be assured the application material will be an accurate, honest and true picture of you.

Never Quit

At times it might seem like you have been searching forever and there is little hope to finding something suitable. The job for you is out there so keep on looking as you continue to develop your skills and gain experiences. Capitalize on the volunteer activities, committees, youth groups, honor groups and athletics that you have participated in. These are all skill building activities!

Helpful links to job hunting tools:
www.jobsnd.com
www.workforce.nd.gov
www.careeronestop.org
www.rileyguide.com
www.ndyouthforward.com

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



Is Self-Employment for You?

If you're a person with a strong entrepreneurial spirit, and you have what it will take to launch and operate a successful business, perhaps self-employment is for you! Today there's a growing demand for "free agents" – contractors, consultants, project workers (particularly in technology fields), service providers, and others – as companies attempt to trim labor and benefit costs. More and more companies are increasingly using specialists from the "outside" for specific projects. Or perhaps you desire to operate a home or "cottage" business to produce something or provide a service. Self-employment opportunities are boundless if you possess the necessary skills and abilities (or can acquire them), are willing to work hard and take risks, and have the time and financial resources needed. To help determine if this route is best for you, you'll need to do an honest self-assessment to decide what business skills you have, what skills you need, and if you have the desire to learn what you need to know.

Are you ready to start a business of your own?
Answer "Yes" or "No" to each of the following questions.

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

For more information about starting your own business, visit www.sba.gov and www.ndsbdc.org.



Extended Learning Experiences

Expect competition for the jobs you want. 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

Which of these benefits do you want?

- Gain work experience that gives you a competitive edge.
- "Try out" a career and see if it meets your expectations.
- Build a connection with an employer.
- Gain knowledge and skills specific to an occupation and industry.
- Develop your interests and gain insights into yourself.
- Develop general workplace skills.
- Accomplish things that benefit others – make the world a better place.
- Get paid for some of these opportunities.

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

Are You an Entrepreneur?

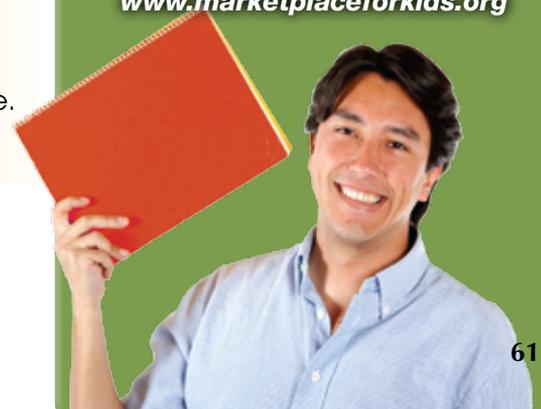
Visit www.nd.gov/cte/crn/docs/EmployYourself.pdf to complete a checklist to help you learn more about entrepreneurs and yourself!

You can also contact:

**Marketplace for Ideas/
Marketplace for Kids**

210 N 4th St, Bismarck ND 58501
701-663-0150 or 888-384-8410

www.marketplaceofideas.org
www.marketplaceforkids.org



HELPFUL RESOURCES

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
701-662-1536

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

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

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

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

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

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

Minot Adult Learning Center
Minot Public Schools
701-857-4488

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

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

Wahpeton Adult Education Program
North Dakota State College of Science
701-671-2184

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

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

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

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 7

New Town

204 Main St
701-627-4390

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

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

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
117 1st Street East
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 South 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 West
PO Box 1266
Williston, ND 58802-1266

Vocational Rehabilitation Offices:

www.nd.gov/dhs/dvr/about/regional-contact.html

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



Grow the Skills You Need

You will soon be entering a highly competitive workforce based on a global knowledge and information economy. To be career and college ready, you need to be able to integrate and apply 21st century skills, technical knowledge and skills, and core academic knowledge. With an emphasis on real world, real life skills, Career and Technical Education in North Dakota connects you to academics and training that will help you be successful in the future.

NORTH DAKOTA STUDENT CTSO LEADERS



DECA allows you to connect to the world of marketing and business outside the classroom.

**FBLA/
PBL** gives students valuable connections to business and industry partners.



FFA provides challenging coursework and hands-on experiences in agriculture education.



SkillsUSA promotes work skills, teamwork and citizenship in trade, industry and health careers.



TSA is devoted to students interested in technology through careers in various technical areas.



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

No matter what your dream, you can pursue it through CTE.

Career and Technical Student Organizations (CTSO)

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

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