



Name _____

Agriculture, Food & Natural Resources Career Cluster

| Pathway | OCCUPATIONS RELATING TO THIS CAREER CLUSTER |
|--------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Agribusiness Systems | Sales Manager • Ag Lender • Ag Economist • Ag Products Buyer/Distributor • Feed-Supply Store Manager • Farm Investment Manager • Ag Commodity Broker |
| Animal Systems | Wildlife Biologist • Animal Nutritionist • Livestock Buyer • Livestock Geneticist • Veterinarian • USDA Inspector • Aquaculturist • Equine Manager |
| Environmental Service Systems | Pollution Prevention Technician • Hazardous Materials Handler • Water Quality Manager • Health and Safety Sanitarian • Toxicologist |
| Food Products & Processing Systems | Food Scientist • Quality Control Specialist • Biochemist-Nutritionist • Dietician • Microbiologist • Bacteriologist • Food and Fiber Engineer • Produce Buyer |
| Natural Resources Systems | Park Manager • Range Technician • Ecologist • Fish & Game Officer • Forest Technician • Geology Technician • Mining Engineers • Hydrologist |
| Plant Systems | Soil/Water Specialist • Botanist • Tree Surgeon • Plant Pathologist • Commodity Marketing Specialist • Golf Course Superintendent • Custom Hay/Silage Operator |
| Power, Structural & Technical Systems | Remote Sensing Specialist • Equipment/Parts Manager • Welder • GPS Technician • Machinist • Heavy Equipment Maintenance Technician |

| HIGH SCHOOL COURSE REQUIREMENTS | | | | |
|--------------------------------------------------------------------------------------------|-------------------------------------------------|---------------------------------------------------------|----------------------------------------------------------------------|---------------------------------------------------------------------|
| English Four units required to graduate; including literature, composition, and speech. | Math Three units required to graduate | Science Three units required to graduate. | Social Studies Three units required to graduate. | Physical Education One unit required to graduate. |
| Choices may include: | Choices may include: | Required Units: | Required Units: | Required Units: |
| <input type="checkbox"/> English 9 05071 | <input type="checkbox"/> Algebra I 11031 | <input type="checkbox"/> Physical Science 13030 | <input type="checkbox"/> U.S. History 15085 | <input type="checkbox"/> Physical Education 1 unit 08030 |
| <input type="checkbox"/> English 10 05072 | <input type="checkbox"/> Geometry 11120 | <input type="checkbox"/> Biology 13020 | <input type="checkbox"/> American Government ½ unit AND 15111 | OR |
| <input type="checkbox"/> English 11 05073 | <input type="checkbox"/> Advanced Algebra 11032 | <input type="checkbox"/> One additional unit of Science | <input type="checkbox"/> Economics ½ unit 15060 | <input type="checkbox"/> Physical Education ½ unit AND 08030 |
| <input type="checkbox"/> English 12 05074 | | OR | OR | <input type="checkbox"/> Health ½ unit 18010 |
| | | <input type="checkbox"/> Biology 13020 | <input type="checkbox"/> Problems of Democracy 1 unit 15201 | |
| | | <input type="checkbox"/> Chemistry 13031 | | |
| | | <input type="checkbox"/> Physics 13042 | Additional units may include: | |
| | | | <input type="checkbox"/> Civics | |
| | | | <input type="checkbox"/> Geography | |
| | | | <input type="checkbox"/> Psychology | |
| | | | <input type="checkbox"/> World History | |

| Career and Technical Education Electives Three units of foreign or Native American language, fine arts, or career and technical education are required to graduate. | | | | | Extended Learning Opportunities | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-----------------------------------------------------------------------|--|--|-------------------------------------------------------------------|---------------------------------------------------|
| Agriculture Education | | | | | School-Based: | Community Based: |
| <input type="checkbox"/> Intro to Agriculture or Agriscience Technology I 01011 or 01021 | | <input type="checkbox"/> Botany/Horticulture Science I 01053 | | | <input type="checkbox"/> FFA | <input type="checkbox"/> Mentorship |
| <input type="checkbox"/> Foundations of Ag or Agriscience Technology II 01012 or 01022 | | <input type="checkbox"/> Botany/Horticulture Science II 01054 | | | <input type="checkbox"/> FCCLA | <input type="checkbox"/> Volunteer |
| <input type="checkbox"/> Agriculture III or Agriscience Technology III 01073 or 01023 | | <input type="checkbox"/> Agronomy Science 01025 | | | <input type="checkbox"/> FBLA | <input type="checkbox"/> Part-time Employment |
| <input type="checkbox"/> Agriculture IV 01074 | | <input type="checkbox"/> Livestock Production 01061 | | | <input type="checkbox"/> DECA | <input type="checkbox"/> Service-Learning Project |
| <input type="checkbox"/> CASE – Intro to Ag, Food & Natural Resources 01080 | | <input type="checkbox"/> Equine Science 01062 | | | <input type="checkbox"/> SkillsUSA | <input type="checkbox"/> Job Shadow |
| <input type="checkbox"/> Agriculture Sales and Service 01034 | | <input type="checkbox"/> Small Animal Care 01066 | | | <input type="checkbox"/> TSA | <input type="checkbox"/> Internship |
| <input type="checkbox"/> Agricultural Business Management 01035 | | <input type="checkbox"/> Veterinary Science 01067 | | | <input type="checkbox"/> Supervised Agricultural Experience (SAE) | |
| <input type="checkbox"/> Agricultural Mechanics Technology I 01043 | | <input type="checkbox"/> Agricultural Processing 01068 | | | <input type="checkbox"/> Career Research | |
| <input type="checkbox"/> Agricultural Mechanics Technology II 01044 | | <input type="checkbox"/> Natural/Environmental Resources 01063 | | | <input type="checkbox"/> Cooperative Work Experience | |
| <input type="checkbox"/> Agricultural Mechanics Power Systems 01045 | | <input type="checkbox"/> Individual Agricultural Studies 01990 | | | | |
| <input type="checkbox"/> Agricultural Welding & Fabrication 01046 | | <input type="checkbox"/> Supervised Agricultural Experience 01995 | | | | |
| <input type="checkbox"/> Advanced Ag Welding & Fabrication 01047 | | <input type="checkbox"/> CASE-Principles of Ag Science - Plant 01025 | | | | |
| | | <input type="checkbox"/> CASE-Principles of Ag Science - Animal 01081 | | | | |

North Dakota Agriculture, Food & Natural Resources Related Postsecondary Programs

| Pathway | Certificate or Associate's Degree | Bachelor's Degree | Master's Degree or More |
|--------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Agribusiness Systems | <input type="checkbox"/> Ag Business Management (NDSCS) <input type="checkbox"/> Agricultural Sales and Service (DSU) <input type="checkbox"/> Agriculture transfer (BSC, DCB, DSU, NDSCS, WSC) <input type="checkbox"/> Adult Farm Management (LRSC) <input type="checkbox"/> Farm Management Education (BSC) <input type="checkbox"/> Farm/Ranch Management (BSC, DSU, NDSCS) <input type="checkbox"/> Precision Agriculture (LRSC, NDSCS) | <input type="checkbox"/> Agribusiness (NDSU) <input type="checkbox"/> Agricultural and Biosystems Engineering (NDSU) <input type="checkbox"/> Agricultural Economics (NDSU) <input type="checkbox"/> Agricultural Education (NDSU) <input type="checkbox"/> Agricultural Studies (DSU) <input type="checkbox"/> Agricultural Systems Management (NDSU) <input type="checkbox"/> General Agriculture (NDSU) <input type="checkbox"/> Precision Agriculture (NDSU) | <input type="checkbox"/> Agribusiness and Applied Economics (NDSU) <input type="checkbox"/> Agricultural and Biosystems Engineering (NDSU) <input type="checkbox"/> Agricultural Education (NDSU) <input type="checkbox"/> Extension Education (NDSU) <input type="checkbox"/> International Agribusiness (NDSU) |
| Animal Systems | <input type="checkbox"/> Animal Science (NDSCS) <input type="checkbox"/> Equine Studies/Horse Production (DSU, NHSC) <input type="checkbox"/> Pre-Veterinary Medicine transfer (BSC, DCB) <input type="checkbox"/> Ranch Management (NDSCS) <input type="checkbox"/> Wildlife and Fisheries Technology (DCB, NDSCS) | <input type="checkbox"/> Animal Science (NDSU) <input type="checkbox"/> Equine Science (NDSU) <input type="checkbox"/> Fisheries and Wildlife Biology/Science (UM, UND, VCSU) <input type="checkbox"/> Vet Technology (NDSU) | <input type="checkbox"/> Animal Science (NDSU) |
| Environmental Service Systems | <input type="checkbox"/> Environmental Science/Technology (DCB, NHSC, SBC, UTTC) <input type="checkbox"/> Water & Wastewater Technology (BSC) | <input type="checkbox"/> Energy Management (BSC) <input type="checkbox"/> Environmental Design (NDSU) <input type="checkbox"/> Environmental Geoscience (UND) <input type="checkbox"/> Environmental Science (DSU, NHSC, SBC, UTTC, UND, VCSU) | <input type="checkbox"/> Environmental and Conservation Science (NDSU) <input type="checkbox"/> Environmental Science (SBC) <input type="checkbox"/> Environmental Engineering (UND) |
| Food Products & Processing Systems | <input type="checkbox"/> Sustainable Ag and Food Systems (UTTC) | <input type="checkbox"/> Food Science (NDSU) | <input type="checkbox"/> Cereal Science (NDSU) <input type="checkbox"/> Food Safety (NDSU) |
| Natural Resources Systems | <input type="checkbox"/> Ag Management and Technology (DCB) <input type="checkbox"/> Natural Resources Management (CCCC, DCB, TMCC) <input type="checkbox"/> Recreation Management (DCB) | <input type="checkbox"/> Natural Resources Management (NDSU) | <input type="checkbox"/> Natural Resources Management (NDSU) <input type="checkbox"/> Energy Systems Engineering (UND) |
| Plant Systems | <input type="checkbox"/> Agriculture Industry and Technology-Agronomy (BSC) <input type="checkbox"/> Agronomy (NDSCS) <input type="checkbox"/> Aquaponics (DCB) <input type="checkbox"/> Floral Design and Greenhouse Technology (DCB) <input type="checkbox"/> Specialty Crop Production (DCB) <input type="checkbox"/> Urban Forest Management (DCB) | <input type="checkbox"/> Crop and Weed Sciences (NDSU) <input type="checkbox"/> Horticulture (NDSU) <input type="checkbox"/> Range Science (NDSU) <input type="checkbox"/> Soil Science (NDSU) | <input type="checkbox"/> Horticulture (NDSU) <input type="checkbox"/> Plant Pathology (NDSU) <input type="checkbox"/> Plant Sciences (NDSU) <input type="checkbox"/> Range Science (NDSU) <input type="checkbox"/> Soil Science (NDSU) |
| Power, Structure, & Technical Systems | <input type="checkbox"/> Caterpillar Dealer Service Technician (NDSCS) <input type="checkbox"/> Diesel Technology: General Diesel, Case IH, Komatsu (NDSCS) <input type="checkbox"/> Energy Services & Renewable Technician (BSC) <input type="checkbox"/> John Deere Tech (NDSCS) <input type="checkbox"/> Nuclear Power Technology (BSC) <input type="checkbox"/> Petroleum Production Technology (BSC, WSC) <input type="checkbox"/> Power Plant Technology (BSC) <input type="checkbox"/> Process Plant/Power Plant Technology (BSC, TMCC) <input type="checkbox"/> Wind Energy Technology (LRSC) | <input type="checkbox"/> Energy Management (BSC) | |

North Dakota Postsecondary Institutions Offering Agriculture, Food & Natural Resources Related Programs

| | | | | | |
|--------------|------------------------------------|--------------------------------------------------------------------|-------------|-----------------------------------|--------------------------------------------------------------------|
| BSC | Bismarck State College | www.bismarckstate.edu | NHSC | Nueta Hidatsa Sahnish College | http://nhsc.edu |
| CCCC | Cankdeska Cikana Community College | www.littlehoop.edu | SBC | Sitting Bull College | www.sittingbull.edu |
| DCB | Dakota College at Bottineau | www.dakotacollege.edu | TMCC | Turtle Mountain Community College | www.tm.edu |
| DSU | Dickinson State University | www.dickinsonstate.edu | UM | University of Mary | www.umary.edu |
| LRSC | Lake Region State College | www.lrsc.edu | UND | University of North Dakota | www.und.edu |
| NDSCS | ND State College of Science | www.ndscs.edu | UTTC | United Tribes Technical College | www.uttc.edu |
| NDSU | ND State University | www.ndsu.edu | VCSU | Valley City State University | www.vcsu.edu |
| | | | WSC | Williston State College | www.willistonstate.edu |



Name _____

Architecture & Construction Career Cluster

| Pathway | OCCUPATIONS RELATING TO THIS CAREER CLUSTER |
|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Construction | Carpenter • Drywall Installer • Painter • Equipment and Materials Manager • Electrician • Plumber • Specialty Contractor • Project Inspector • Construction Engineer |
| Design/Pre-Construction | Building Code Official • Architect • Cost Estimator • Specification Writer • Architectural and Civil Drafting Technician • Regional and Urban Planner |
| Maintenance/Operations | Maintenance Scheduler • Construction Engineer • Estimator • System Installer • Subcontractor • Hazardous Material Remover • Security and Fire Alarm System Manager |

| HIGH SCHOOL COURSE REQUIREMENTS | | | | |
|--------------------------------------------------------------------------------------------|-------------------------------------------------|---------------------------------------------------------|----------------------------------------------------------------------|---------------------------------------------------------------------|
| English Four units required to graduate; including literature, composition, and speech. | Math Three units required to graduate | Science Three units required to graduate. | Social Studies Three units required to graduate. | Physical Education One unit required to graduate. |
| Choices may include: | Choices may include: | Required Units: | Required Units: | Required Units: |
| <input type="checkbox"/> English 9 05071 | <input type="checkbox"/> Algebra I 11031 | <input type="checkbox"/> Physical Science 13030 | <input type="checkbox"/> U.S. History 15085 | <input type="checkbox"/> Physical Education 1 unit 08030 |
| <input type="checkbox"/> English 10 05072 | <input type="checkbox"/> Geometry 11120 | <input type="checkbox"/> Biology 13020 | <input type="checkbox"/> American Government ½ unit AND 15111 | OR |
| <input type="checkbox"/> English 11 05073 | <input type="checkbox"/> Advanced Algebra 11032 | <input type="checkbox"/> One additional unit of Science | <input type="checkbox"/> Economics ½ unit 15060 | <input type="checkbox"/> Physical Education ½ unit AND 08030 |
| <input type="checkbox"/> English 12 05074 | | OR | OR | <input type="checkbox"/> Health ½ unit 18010 |
| | | <input type="checkbox"/> Biology 13020 | <input type="checkbox"/> Problems of Democracy 1 unit 15201 | |
| | | <input type="checkbox"/> Chemistry 13031 | | |
| | | <input type="checkbox"/> Physics 13042 | Additional units may include: | |
| | | | <input type="checkbox"/> Civics | |
| | | | <input type="checkbox"/> Geography | |
| | | | <input type="checkbox"/> Psychology | |
| | | | <input type="checkbox"/> World History | |

| Career & Technical Education Electives Three units of foreign or Native American language, fine arts, or career and technical education are required to graduate. | | | Extended Learning Opportunities | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|------------------------------------|------------------------------------------------------|---------------------------------------------------|
| Trades, Industry and Technical Education | Family & Consumer Sciences Education | Technology & Engineering Education | School-Based: | Community Based: |
| <input type="checkbox"/> Building Trades I 17100 | <input type="checkbox"/> Housing/Living Environments 09133 | | <input type="checkbox"/> Skills USA | <input type="checkbox"/> Mentorship |
| <input type="checkbox"/> Building Trades II 17117 | | | <input type="checkbox"/> TSA | <input type="checkbox"/> Volunteer |
| <input type="checkbox"/> Residential Plumbing 17120 | | | <input type="checkbox"/> FFA | <input type="checkbox"/> Part-time Employment |
| <input type="checkbox"/> Electrical Technology 17125 | <input type="checkbox"/> Construction Technology 10111 | | <input type="checkbox"/> FCCLA | <input type="checkbox"/> Service-Learning Project |
| <input type="checkbox"/> Facilities Maintenance I 17110 | <input type="checkbox"/> Design/Drafting 10259 | | <input type="checkbox"/> FBLA | <input type="checkbox"/> Job Shadow |
| <input type="checkbox"/> Facilities Maintenance II 17118 | <input type="checkbox"/> Engineering Design 10415 | | <input type="checkbox"/> DECA | <input type="checkbox"/> Internship |
| <input type="checkbox"/> Heating, Ventilating and Air Conditioning 17112 | <input type="checkbox"/> PLTW Introduction to Engineering Design 10511 | | <input type="checkbox"/> Career Research | |
| <input type="checkbox"/> Sheet Metal Technology 17115 | <input type="checkbox"/> PLTW Civil Engineering and Architecture 10514 | | <input type="checkbox"/> Cooperative Work Experience | |
| <input type="checkbox"/> Drafting Technology I 17130 | <input type="checkbox"/> Advanced Design Applications 10338 | | | |
| <input type="checkbox"/> Drafting Technology II 17131 | | | | |
| <input type="checkbox"/> PLTW – Introduction to Engineering Design 10511 | | | | |
| <input type="checkbox"/> Architecture & Construction Cluster 37020 | | | | |

North Dakota Architecture & Construction Related Postsecondary Programs

| Pathway | Certificate or Associate's Degree | Bachelor's Degree | Master's Degree or More |
|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|
| Construction | <input type="checkbox"/> Building Construction Technology (BJCC, NDSCS, TMCC) <input type="checkbox"/> Building Trades (SBC) <input type="checkbox"/> Carpentry (BSC, BJCC, CCCC) <input type="checkbox"/> Concrete Technology (TMCC) <input type="checkbox"/> Construction Management/Technology (NDSCS) <input type="checkbox"/> Electric Power Technology (BSC) <input type="checkbox"/> Electrical Technology (NDSCS, SBC, TMCC) <input type="checkbox"/> Heating, Ventilation & Air Conditioning (BSC, NDSCS, TMCC) <input type="checkbox"/> Lineworker-Electrical (BSC) <input type="checkbox"/> Plumbing (NDSCS, TMCC) | <input type="checkbox"/> Construction Engineering (NDSU) <input type="checkbox"/> Construction Management (NDSU, UM) | <input type="checkbox"/> Construction Management (NDSU) |
| Design/Pre-Construction | <input type="checkbox"/> Architectural Drafting and Estimating Technology (NDSCS) <input type="checkbox"/> CDL/Heavy Equipment (CCCC, SBC, TMCC, UTTC) <input type="checkbox"/> Land Surveying and Civil Engineering Technology (NDSCS) <input type="checkbox"/> Pre-Engineering transfer (CCCC, NHSC) | <input type="checkbox"/> Architecture (NDSU) <input type="checkbox"/> Civil Engineering (NDSU, UM, UND) <input type="checkbox"/> Construction Engineering (NDSU) <input type="checkbox"/> Landscape Architecture (NDSU) | <input type="checkbox"/> Architecture (NDSU) <input type="checkbox"/> Civil Engineering (NDSU) |
| Maintenance/Operations | <input type="checkbox"/> Electrical Transmission Systems Technology (BSC) <input type="checkbox"/> Mechanical Systems (NDSCS) <input type="checkbox"/> Mechanical Maintenance Technology (BSC) | | |

North Dakota Postsecondary Institutions Offering Architecture & Construction Related Programs

| | | | | | |
|--------------|------------------------------------|---------------------------------------------------------------------------------------|-------------|-----------------------------------|--------------------------------------------------------------|
| BSC | Bismarck State College | www.bismarckstate.edu | NHSC | Nueta Hidatsa Sahnish College | http://nhsc.edu |
| BJCC | Burdick Job Corps Center | http://quentinnburdick.jobcorps.gov | SBC | Sitting Bull College | www.sittingbull.edu |
| CCCC | Cankdeska Cikana Community College | www.littlehoop.edu | TMCC | Turtle Mountain Community College | www.tm.edu |
| NDSCS | ND State College of Science | www.ndscs.edu | UTTC | United Tribes Technical College | www.uttcc.edu |
| NDSU | ND State University | www.ndsu.edu | UM | University of Mary | www.umary.edu |
| | | | UND | University of North Dakota | www.und.edu |



Name _____

Arts, A/V Technology & Communications Career Cluster

| Pathway | OCCUPATIONS RELATING TO THIS CAREER CLUSTER |
|-------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Audio and Video Technology and Film | Audio Systems Technician • Audio-Video Designer and Engineer • Technical Computer Support • Videographer • Special Effects and Animation Designer Technician |
| Journalism and Broadcasting | Control Room Technician • Design Director • Broadcast Technician • Editor • Producer • Station Manager • Audio-Video Operator |
| Performing Arts | Actor/Actress • Lighting Designer • Scenic Designer • Musician • Composer • Makeup Artist • Playwright • Digital, Video and State Production Manager |
| Printing Technology | Desktop Publishing Specialist • Computer Typography • Pre-production Technician • Plate Maker • Graphics Equipment Operator • Web Page Designer • Lithographer |
| Telecommunications | Network Designer • Telecommunications Technician • Telecommunication Equipment: Cable, Line Repair and Installation • Computer Programmer and Systems Analyst |
| Visual Arts | Fashion Designer • Commercial Artist • Commercial Photographer: Digital, Still, Video, Film • Illustrator • Textile Designer • Interior Designer • Computer Animator |

| HIGH SCHOOL COURSE REQUIREMENTS | | | | |
|--------------------------------------------------------------------------------------------|-------------------------------------------------|---------------------------------------------------------|----------------------------------------------------------------------|---------------------------------------------------------------------|
| English Four units required to graduate; including literature, composition, and speech. | Math Three units required to graduate | Science Three units required to graduate. | Social Studies Three units required to graduate. | Physical Education One unit required to graduate. |
| Choices may include: | Choices may include: | Required Units: | Required Units: | Required Units: |
| <input type="checkbox"/> English 9 05071 | <input type="checkbox"/> Algebra I 11031 | <input type="checkbox"/> Physical Science 13030 | <input type="checkbox"/> U.S. History 15085 | <input type="checkbox"/> Physical Education 1 unit 08030 |
| <input type="checkbox"/> English 10 05072 | <input type="checkbox"/> Geometry 11120 | <input type="checkbox"/> Biology 13020 | <input type="checkbox"/> American Government ½ unit AND 15111 | OR |
| <input type="checkbox"/> English 11 05073 | <input type="checkbox"/> Advanced Algebra 11032 | <input type="checkbox"/> One additional unit of Science | <input type="checkbox"/> Economics ½ unit 15060 | <input type="checkbox"/> Physical Education ½ unit AND 08030 |
| <input type="checkbox"/> English 12 05074 | | OR | OR | <input type="checkbox"/> Health ½ unit 18010 |
| | | <input type="checkbox"/> Biology 13020 | <input type="checkbox"/> Problems of Democracy 1 unit 15201 | |
| | | <input type="checkbox"/> Chemistry 13031 | | |
| | | <input type="checkbox"/> Physics 13042 | Additional units may include: | |
| | | | <input type="checkbox"/> Civics | |
| | | | <input type="checkbox"/> Geography | |
| | | | <input type="checkbox"/> Psychology | |
| | | | <input type="checkbox"/> World History | |

| Career and Technical Education Electives Three units of foreign or Native American language, fine arts, or career and technical education are required to graduate. | | | Extended Learning Opportunities | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------|--|------------------------------------------------------|---------------------------------------------------|
| Business Education | Technology & Engineering Education | | School-Based: | Community Based: |
| <input type="checkbox"/> Multimedia 14099 | <input type="checkbox"/> Technological Design 10410 | | <input type="checkbox"/> DECA | <input type="checkbox"/> Mentorship |
| <input type="checkbox"/> Multimedia II 14100 | <input type="checkbox"/> Invention & Innovation 10510 | | <input type="checkbox"/> FBLA | <input type="checkbox"/> Volunteer |
| <input type="checkbox"/> Communication Technologies 14028 | <input type="checkbox"/> Design/Drafting 10259 | | <input type="checkbox"/> FCCLA | <input type="checkbox"/> Part-time Employment |
| <input type="checkbox"/> Web Design 14022 | <input type="checkbox"/> 3D Modeling & Design 10260 | | <input type="checkbox"/> FFA | <input type="checkbox"/> Service-Learning Project |
| <input type="checkbox"/> Desktop Publishing 14098 | | | <input type="checkbox"/> SkillsUSA | <input type="checkbox"/> Job Shadow |
| Family and Consumer Sciences Education | Trade, Industry, and Technical Education | | <input type="checkbox"/> TSA | <input type="checkbox"/> Internship |
| <input type="checkbox"/> Fashion & Textile Trends 09030 | <input type="checkbox"/> Commercial Art I 17072 | | <input type="checkbox"/> Career Research | |
| <input type="checkbox"/> Housing & Living Environments 09133 | <input type="checkbox"/> Commercial Art II 17073 | | <input type="checkbox"/> Cooperative Work Experience | |
| | <input type="checkbox"/> Photography 17080 | | | |
| Information Technology Education | <input type="checkbox"/> Graphic Communications I 17190 | | | |
| <input type="checkbox"/> Introduction to Web Design 27170 | <input type="checkbox"/> Graphic Communications II 17191 | | | |
| <input type="checkbox"/> Intro to Networking 27265 | <input type="checkbox"/> Audio/Visual Production 17140 | | | |
| | <input type="checkbox"/> Arts, A/V Technology & Communications 37030 | | | |
| Marketing Education | | | | |
| <input type="checkbox"/> Social Media Marketing 04235 | | | | |

North Dakota Arts, A/V Technology & Communications Related Postsecondary Programs

| Pathway | Certificate or Associate's Degree | Bachelor's Degree | Master's Degree or More |
|--------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|
| Audio and Video Technology and Film | <input type="checkbox"/> Digital Audio Production (BSC) | <input type="checkbox"/> Multimedia Studies (MiSU) | <input type="checkbox"/> Library/Information Technology (VCSU) |
| Journalism and Broadcasting | <input type="checkbox"/> English Transfer (BSC, DCB) <input type="checkbox"/> Mass Communications (BSC) <input type="checkbox"/> Speech Communication Transfer (BSC) | <input type="checkbox"/> Broadcasting and Professional Communication (MiSU) <input type="checkbox"/> Communication (DSU, MaSU, UJ, UM, UND, VCSU) <input type="checkbox"/> English (DSU, MaSU, MiSU, NDSU, UJ, UM, UND, VCSU) <input type="checkbox"/> English Education (DSU, MaSU, MiSU, NDSU, UJ, UM, VCSU) <input type="checkbox"/> Journalism (NDSU) | <input type="checkbox"/> Communication (NDSU, UND) <input type="checkbox"/> English (NDSU, UND) |
| Performing Arts | <input type="checkbox"/> Music Transfer (BSC, NDSCS) <input type="checkbox"/> Theatre Arts Transfer (BSC) | <input type="checkbox"/> Music (DSU, MiSU, NDSU, UJ, UM, UND, VCSU) <input type="checkbox"/> Music Education (DSU, MiSU, UJ, UM, UND, VCSU) <input type="checkbox"/> Music Performance (UM, UND) <input type="checkbox"/> Musical Theatre (UND) <input type="checkbox"/> Theatre Arts (DSU, NDSU, UJ, UND) | <input type="checkbox"/> Music (NDSU, UM, UND) |
| Printing Technology | | | |
| Telecommunications | <input type="checkbox"/> Electronics Technology (BSC) <input type="checkbox"/> Electronics/Telecommunications Technology (BSC) <input type="checkbox"/> Web Design (DCB, NDSCS, RU, TMCC) <input type="checkbox"/> Web Developer/Webmaster (DCB, DSU, NDSCS) <input type="checkbox"/> Web Page Development and Design (BSC) | <input type="checkbox"/> Communication (DSU, MaSU, UJ, UM, UND, VCSU) | <input type="checkbox"/> Communication (NDSU, UND) |
| Visual Arts | <input type="checkbox"/> Art Transfer (BSC, DCB) <input type="checkbox"/> Fine Art (CCCC) <input type="checkbox"/> Graphic Design (UTTC) <input type="checkbox"/> Graphic Design-Animation & Motion Graphics (RU) <input type="checkbox"/> Graphic Design-Web & Interactive Design (RU) <input type="checkbox"/> Graphic Design & Communications (BSC) <input type="checkbox"/> Photography (DCB) | <input type="checkbox"/> Apparel, Retail Merchandising, and Design (NDSU) <input type="checkbox"/> Art (DSU, MiSU, NDSU, UJ, VCSU) <input type="checkbox"/> Art Education (DSU, MiSU, NDSU, VCSU) <input type="checkbox"/> Art Entrepreneurship (DSU) <input type="checkbox"/> Arts Administration (MiSU) <input type="checkbox"/> Fine Arts (MiSU, UJ) <input type="checkbox"/> Graphic Design (UND) <input type="checkbox"/> Graphic Design-Animation & Motion Graphics (RU) <input type="checkbox"/> Graphic Design-Web & Interactive Design (RU) <input type="checkbox"/> Graphic Design for E-Commerce (UJ) <input type="checkbox"/> Interior Design (NDSU) <input type="checkbox"/> Visual Arts (UND) | <input type="checkbox"/> Visual Arts (UND) |

North Dakota Postsecondary Institutions Offering Arts, A/V Technology & Communications Related Programs

| | | | | | |
|--------------|------------------------------------|--------------------------------------------------------------------|-------------|-----------------------------------|--------------------------------------------------------------------|
| BSC | Bismarck State College | www.bismarckstate.edu | RU | Rasmussen University | www.rasmussen.edu |
| CCCC | Cankdeska Cikana Community College | www.littlehoop.edu | TMCC | Turtle Mountain Community College | www.tm.edu |
| DCB | Dakota College at Bottineau | www.dakotacollege.edu | UJ | University of Jamestown | www.uj.edu |
| DSU | Dickinson State University | www.dickinsonstate.edu | UTTC | United Tribes Technical College | www.uttcc.edu |
| MaSU | Mayville State University | www.mayvillestate.edu | UM | University of Mary | www.umary.edu |
| MiSU | Minot State University | www.minotstate.edu | UND | University of North Dakota | www.und.edu |
| NDSCS | ND State College of Science | www.ndscs.edu | VCSU | Valley City State University | www.vcsu.edu |
| NDSU | ND State University | www.ndsu.edu | WSC | Williston State College | www.willistonstate.edu |



Name _____

Business Management & Administration

| Pathway | OCCUPATIONS RELATING TO THIS CAREER CLUSTER |
|----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Administrative Support | Administrative Assistant • Office Manager • Customer Service Assistant • Payroll Clerk • Medical Transcriptionist • Legal Secretary • Data Entry Specialist |
| Business Information Management | Information Systems Manager • Controller • Chief Financial Officer • Chief Technology Officer • Budget Analyst • Auditor • Information Technology Director |
| General Management | General Manager • Small Business Owner • Facilities Manager • Human Resource Manager • Chief Executive Officer • Entrepreneur • First Line Supervisor |
| Human Resources Management | Human Resource Manager • Industrial Relations Director • Compensation & Benefits Manager • Corporate Trainer • Personnel Recruiter • Occupational Analyst |
| Operations Management | Customer Service Supervisor • Sales Manager • Industrial Production Manager • Research & Development Manager • Training & Development Manager • E-Commerce Analyst |

| HIGH SCHOOL COURSE REQUIREMENTS | | | | |
|---------------------------------------------------------------------------------|-------------------------------------------------|---------------------------------------------------------|----------------------------------------------------------------------|---------------------------------------------------------------------|
| English | Math | Science | Social Studies | Physical Education |
| Four units required to graduate; including literature, composition, and speech. | Three units required to graduate | Three units required to graduate. | Three units required to graduate. | One unit required to graduate. |
| Choices may include: | Choices may include: | Required Units: | Required Units: | Required Units: |
| <input type="checkbox"/> English 9 05071 | <input type="checkbox"/> Algebra I 11031 | <input type="checkbox"/> Physical Science 13030 | <input type="checkbox"/> U.S. History 15085 | <input type="checkbox"/> Physical Education 1 unit 08030 |
| <input type="checkbox"/> English 10 05072 | <input type="checkbox"/> Geometry 11120 | <input type="checkbox"/> Biology 13020 | <input type="checkbox"/> American Government ½ unit AND 15111 | OR |
| <input type="checkbox"/> English 11 05073 | <input type="checkbox"/> Advanced Algebra 11032 | <input type="checkbox"/> One additional unit of Science | <input type="checkbox"/> Economics ½ unit 15060 | <input type="checkbox"/> Physical Education ½ unit AND 08030 |
| <input type="checkbox"/> English 12 05074 | | OR | OR | <input type="checkbox"/> Health ½ unit 18010 |
| | | <input type="checkbox"/> Biology 13020 | <input type="checkbox"/> Problems of Democracy 1 unit 15201 | |
| | | <input type="checkbox"/> Chemistry 13031 | | |
| | | <input type="checkbox"/> Physics 13042 | Additional units may include: | |
| | | | <input type="checkbox"/> Civics | |
| | | | <input type="checkbox"/> Geography | |
| | | | <input type="checkbox"/> Psychology | |
| | | | <input type="checkbox"/> World History | |

| Career & Technical Education Electives | | | | Extended Learning Opportunities | | | | | |
|----------------------------------------------------------------------------------------------------------------------------|----------------------------------|--------------------------|--------------------------|---------------------------------|---------------|--------------------------|-----------------------------|--------------------------|--------------------------|
| Three units of foreign or Native American language, fine arts, or career and technical education are required to graduate. | | | | | | | | | |
| Business Education | | <input type="checkbox"/> | Business Communication | 14060 | School-Based: | | Community Based: | | |
| <input type="checkbox"/> | Accounting I | 14010 | <input type="checkbox"/> | Communication Technologies | 14028 | <input type="checkbox"/> | FBLA | <input type="checkbox"/> | Mentorship |
| <input type="checkbox"/> | Accounting II | 14011 | <input type="checkbox"/> | Business Law | 14090 | <input type="checkbox"/> | DECA | <input type="checkbox"/> | Volunteer |
| <input type="checkbox"/> | Accounting III | 14012 | <input type="checkbox"/> | Management I | 14231 | <input type="checkbox"/> | FFA | <input type="checkbox"/> | Part-time Employment |
| <input type="checkbox"/> | Accounting IV | 14013 | <input type="checkbox"/> | Management II | 14232 | <input type="checkbox"/> | FCCLA | <input type="checkbox"/> | Service-Learning Project |
| <input type="checkbox"/> | Business Computer Applications | 14024 | <input type="checkbox"/> | Global Management | 14233 | <input type="checkbox"/> | SkillsUSA | <input type="checkbox"/> | Job Shadow |
| <input type="checkbox"/> | Spreadsheets | 14025 | <input type="checkbox"/> | Operations Management | 14234 | <input type="checkbox"/> | TSA | <input type="checkbox"/> | Internship |
| <input type="checkbox"/> | Business Technology & Procedures | 14079 | <input type="checkbox"/> | Business Finance | 14016 | <input type="checkbox"/> | Career Research | | |
| <input type="checkbox"/> | Database | 14026 | <input type="checkbox"/> | Forensic Accounting | 14014 | <input type="checkbox"/> | Cooperative Work Experience | | |
| <input type="checkbox"/> | Desktop Publishing | 14098 | <input type="checkbox"/> | Entrepreneurial Accounting | 14015 | | | | |
| <input type="checkbox"/> | Entrepreneurship | 14111 | <input type="checkbox"/> | Financial Literacy | 14095 | | | | |
| <input type="checkbox"/> | Business Fundamentals | 14230 | <input type="checkbox"/> | Multimedia | 14099 | | | | |
| <input type="checkbox"/> | Word Processing | 14096 | <input type="checkbox"/> | Multimedia II | 14100 | | | | |
| <input type="checkbox"/> | Web Design | 14022 | | | | | | | |

North Dakota Business Management & Administration Related Postsecondary Programs

| Pathway | Certificate or Associate's Degree | Bachelor's Degree | Master's Degree or More |
|----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Administrative Support | <input type="checkbox"/> Administrative Assistant (BSC, LRSC) <input type="checkbox"/> Bookkeeping (DCB) <input type="checkbox"/> Business Fundamentals (DSU) <input type="checkbox"/> Data Entry Specialist (DSU) <input type="checkbox"/> Office Technology (CCCC) <input type="checkbox"/> Computer Support Specialist (TMCC) <input type="checkbox"/> Office Administration (BJCC, DSU) <input type="checkbox"/> Reception Services (DCB, DSU) | | |
| Business Information Management | <input type="checkbox"/> Business Management (MaSU, NDSCS, RC, WSC) <input type="checkbox"/> Business Technology Management (NDSCS) <input type="checkbox"/> Business Transfer (NDSCS) <input type="checkbox"/> Information Processing Specialist (BSC) <input type="checkbox"/> Information Technology/Management (DCB, LRSC, NDSCS, RC, SBC, UTTC, WSC) <input type="checkbox"/> Management Information Systems transfer (NDSCS) | <input type="checkbox"/> Applied Business Information Technology (MiSU) <input type="checkbox"/> Business Management (RC) <input type="checkbox"/> Business Process Integration Management (VCSU) <input type="checkbox"/> Information Systems (UND) <input type="checkbox"/> Information Technology Management (RC, UJ, UM) <input type="checkbox"/> Management Communication (NDSU) <input type="checkbox"/> Management Information Systems (MiSU, NDSU) <input type="checkbox"/> Management Information Science (UJ) | <input type="checkbox"/> Business Analytics (NDSU) <input type="checkbox"/> Information Systems (MiSU) |
| General Management | <input type="checkbox"/> Business Administration (BSC, CCCC, DCB, NDSCS, NHSC, SBC, TBC, TMCC, UTTC) <input type="checkbox"/> Computerized Office Management (DCB) <input type="checkbox"/> Computer Support Specialist (TMCC) <input type="checkbox"/> Entrepreneurship (NDSCS, NHSC, TMCC) <input type="checkbox"/> Management (BSC) <input type="checkbox"/> Management Entrepreneurship (BSC) <input type="checkbox"/> Small Business Management (DCB) | <input type="checkbox"/> Business Administration (DSU, MaSU, NDSU, SBC, TBC, UTTC, UJ, UM, VCSU) <input type="checkbox"/> Business Education (DSU, MiSU, UM, VCSU) <input type="checkbox"/> Entrepreneurship (MiSU, UND) <input type="checkbox"/> International Business (MiSU) <input type="checkbox"/> International Entrepreneurship (TBC) <input type="checkbox"/> Leadership & Management (TMCC) <input type="checkbox"/> Management (MiSU, NDSU, UND, VCSU) | <input type="checkbox"/> Business (UM, UND) <input type="checkbox"/> Business Administration (NDSU, UM) <input type="checkbox"/> Management (MiSU) <input type="checkbox"/> Managerial Leadership (UM) <input type="checkbox"/> Project Management (UM) <input type="checkbox"/> Public Administration (UM, UND) |
| Human Resources Management | <input type="checkbox"/> Human Resource Management (DSU) | <input type="checkbox"/> Human Resource Management (UND) <input type="checkbox"/> Human Resources and Organizational Leadership (RC) | <input type="checkbox"/> Human Resource Management (RC, UM) |
| Operations Management | <input type="checkbox"/> Business Management (MaSU) <input type="checkbox"/> Management (BSC) <input type="checkbox"/> Small Business Management (DCB) | <input type="checkbox"/> Business Economics (UND) <input type="checkbox"/> Business Management (RC) <input type="checkbox"/> Management Communication (NDSU) <input type="checkbox"/> Operations & Supply Chain Management (UND) | <input type="checkbox"/> Business Operations (UM) |

North Dakota Postsecondary Institutions Offering Business Management & Administration Related Programs

| | | | | | |
|--------------|------------------------------------|---------------------------------------------------------------------------------------|-------------|-----------------------------------|------------------------------------------------------------------------------|
| BSC | Bismarck State College | www.bismarckstate.edu | RU | Rasmussen University | www.rasmussen.edu |
| BJCC | Burdick Job Corps Center | http://quentinnburdick.jobcorps.gov | SBC | Sitting Bull College | www.sittingbull.edu |
| CCCC | Cankdeska Cikana Community College | www.littlehoop.edu | TBC | Trinity Bible College | www.trinitybiblecollege.edu |
| DCB | Dakota College at Bottineau | www.dakotacollege.edu | TMCC | Turtle Mountain Community College | www.tm.edu |
| DSU | Dickinson State University | www.dickinsonstate.edu | UTTC | United Tribes Technical College | www.uttcc.edu |
| LRSC | Lake Region State College | www.lrsc.edu | UJ | University of Jamestown | www.uj.edu |
| MaSU | Mayville State University | www.mayvillestate.edu | UM | University of Mary | www.umary.edu |
| MiSU | Minot State University | www.minotstateu.edu | UND | University of North Dakota | www.und.edu |
| NDSCS | ND State College of Science | www.ndscs.edu | VCSU | Valley City State University | www.vcsu.edu |
| NDSU | ND State University | www.ndsu.edu | WSC | Williston State College | www.willistonstate.edu |
| NHSC | Nueta Hidatsa Sahnish College | http://nhsc.edu | | | |



Name _____

Education & Training Career Cluster

| Pathway | OCCUPATIONS RELATING TO THIS CAREER CLUSTER |
|----------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Administration & Administration Support | Superintendent • Principal • Instructional Media Designer • Educational Researcher • Test Measurement Specialist • Curriculum and Instruction Specialist |
| Professional Support Services | School or Career Development Counselor • Psychologist (Clinical, Developmental, Social) • Speech Language Pathologist/Audiologist • Social Worker |
| Teaching/Training | Elementary & Secondary Teachers • University Professor • Special Education Teacher • Preschool/Early Childhood Teacher • Child Care Director • Aide/Paraprofessional |

| HIGH SCHOOL COURSE REQUIREMENTS | | | | |
|---------------------------------------------------------------------------------|-------------------------------------------------|---------------------------------------------------------|----------------------------------------------------------------------|---------------------------------------------------------------------|
| English | Math | Science | Social Studies | Physical Education |
| Four units required to graduate; including literature, composition, and speech. | Three units required to graduate | Three units required to graduate. | Three units required to graduate. | One unit required to graduate. |
| Choices may include: | Choices may include: | Required Units: | Required Units: | Required Units: |
| <input type="checkbox"/> English 9 05071 | <input type="checkbox"/> Algebra I 11031 | <input type="checkbox"/> Physical Science 13030 | <input type="checkbox"/> U.S. History 15085 | <input type="checkbox"/> Physical Education 1 unit 08030 |
| <input type="checkbox"/> English 10 05072 | <input type="checkbox"/> Geometry 11120 | <input type="checkbox"/> Biology 13020 | <input type="checkbox"/> American Government ½ unit AND 15111 | OR |
| <input type="checkbox"/> English 11 05073 | <input type="checkbox"/> Advanced Algebra 11032 | <input type="checkbox"/> One additional unit of Science | <input type="checkbox"/> Economics ½ unit 15060 | <input type="checkbox"/> Physical Education ½ unit AND 08030 |
| <input type="checkbox"/> English 12 05074 | | OR | OR | <input type="checkbox"/> Health ½ unit 18010 |
| | | <input type="checkbox"/> Biology 13020 | <input type="checkbox"/> Problems of Democracy 1 unit 15201 | |
| | | <input type="checkbox"/> Chemistry 13031 | | |
| | | <input type="checkbox"/> Physics 13042 | Additional units may include: | |
| | | | <input type="checkbox"/> Civics | |
| | | | <input type="checkbox"/> Geography | |
| | | | <input type="checkbox"/> Psychology | |
| | | | <input type="checkbox"/> World History | |

| Career and Technical Education Electives | | Extended Learning Opportunities | |
|----------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|------------------------------------------------------|---------------------------------------------------|
| Three units of foreign or Native American language, fine arts, or career and technical education are required to graduate. | | | |
| Business Education | Family Consumer Sciences Education | School-Based: | Community Based: |
| <input type="checkbox"/> Word Processing 14096 | <input type="checkbox"/> Child Development 09026 | <input type="checkbox"/> FBLA | <input type="checkbox"/> Mentorship |
| <input type="checkbox"/> Financial Literacy 14095 | <input type="checkbox"/> Individual and Family Health 09129 | <input type="checkbox"/> FCCLA | <input type="checkbox"/> Volunteer |
| <input type="checkbox"/> Communication Technologies 14028 | <input type="checkbox"/> Parenting 09130 | <input type="checkbox"/> FFA | <input type="checkbox"/> Part-time Employment |
| | <input type="checkbox"/> Nutrition and Foods Preparation I 09131 | <input type="checkbox"/> DECA | <input type="checkbox"/> Service-Learning Project |
| | <input type="checkbox"/> Family Living 09132 | <input type="checkbox"/> SkillsUSA | <input type="checkbox"/> Job Shadow |
| Health Science Education | <input type="checkbox"/> Consumer & Resource Management 09028 | <input type="checkbox"/> TSA | <input type="checkbox"/> Internship |
| <input type="checkbox"/> Prevention/Care of Athletic Injuries 07034 | <input type="checkbox"/> Early Childhood Care & Education Services 09211 | <input type="checkbox"/> Career Research | |
| <input type="checkbox"/> Emergency Medical Services 07045 | <input type="checkbox"/> Teaching Profession 09041 | <input type="checkbox"/> Cooperative Work Experience | |
| <input type="checkbox"/> Sign Language I 07021 | <input type="checkbox"/> Educational Methodology 09042 | | |
| <input type="checkbox"/> Sign Language II 07022 | | | |
| <input type="checkbox"/> Sign Language III 07023 | | | |
| <input type="checkbox"/> Sign Language IV 07024 | | | |

North Dakota Education & Training Related Postsecondary Programs

| Pathway | Certificate or Associate's Degree | Bachelor's Degree | Master's Degree or More |
|----------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Administration & Administration Support | | | <input type="checkbox"/> Educational Leadership (NDSU, UND) <input type="checkbox"/> Elementary Administration (UM) <input type="checkbox"/> Secondary Administration (UM) |
| Professional Support Services | <input type="checkbox"/> American Sign Language and Interpreting Studies (LRSC) <input type="checkbox"/> Early Child Development Associate (DCB, NHSC) <input type="checkbox"/> Paraprofessional Education (DCB) <input type="checkbox"/> Speech Language Pathology Paraprofessional (LRSC, WSC) | <input type="checkbox"/> Communication Sciences & Disorders (MiSU, UM, UND) <input type="checkbox"/> Communication (DSU) <input type="checkbox"/> Interpreting & Sign Language Studies (MiSU) | <input type="checkbox"/> Communication Sciences and Disorders (MiSU, UND) <input type="checkbox"/> Counseling (NDSU, UJ, UM, UND) <input type="checkbox"/> Counseling Psychology (UND) <input type="checkbox"/> Counseling with K-12 School Emphasis (NDSU, UM, UND) <input type="checkbox"/> Library and Information Technologies (VCSU) |
| Teaching/Training | <input type="checkbox"/> Anishinaabe Language (TMCC) <input type="checkbox"/> Business Education transfer (BSC, DCB) <input type="checkbox"/> Dakota Studies (CCCC) <input type="checkbox"/> Early Childhood Education (BSC, CCCC, DCB, LRSC, MaSU, NDSCS, NHSC, RU, SBC) <input type="checkbox"/> Education transfer (NDSCS, SBC) <input type="checkbox"/> Elementary Education transfer (BSC, DCB, NDSCS, UTTC) <input type="checkbox"/> Foreign Language transfer (BSC) <input type="checkbox"/> Health, Physical Education and Recreation transfer (CCCC, NDSCS, UTTC) <input type="checkbox"/> Lakhotiyapi/Dakhotiyapi I/II (SBC) <input type="checkbox"/> Middle School Math Certificate (NHSC) <input type="checkbox"/> Middle School Science Certificate (NHSC) <input type="checkbox"/> Native American Studies (SBC) <input type="checkbox"/> Physical Education transfer (BSC, DCB) <input type="checkbox"/> Secondary Education transfer (BSC, DCB) <input type="checkbox"/> Special Education transfer (DCB) <input type="checkbox"/> Teacher Education transfer (SBC) | <input type="checkbox"/> Agriculture Education (NDSU) <input type="checkbox"/> Art Education (DSU, MiSU, NDSU, VCSU) <input type="checkbox"/> Biology Education (DSU, MaSU, MiSU, NDSU, UJ, UM, VCSU) <input type="checkbox"/> Business Education (DSU, MiSU, UM, VCSU) <input type="checkbox"/> Career and Technical Education (VCSU) <input type="checkbox"/> Chemistry Education (DSU, MaSU, MiSU, NDSU, VCSU) <input type="checkbox"/> Composite/Comprehensive Science Education (DSU, NDSU) <input type="checkbox"/> Early Childhood Education (MaSU, MiSU, RU, SBC, UM, UND) <input type="checkbox"/> Earth Science Education (MiSU, NDSU) <input type="checkbox"/> Elementary Education (DSU, MaSU, MiSU, NHSC, SBC, TBC, TMCC, UTTC, UJ, UM, UND, VCSU) <input type="checkbox"/> English Education (DSU, MaSU, MiSU, NDSU, UJ, UM, VCSU) <input type="checkbox"/> Exceptional Learners (UM) <input type="checkbox"/> Family & Consumer Sciences Education (NDSU) <input type="checkbox"/> Foreign Language Education (MiSU) <input type="checkbox"/> French Education (NDSU) <input type="checkbox"/> Health Education (MaSU, NDSU, VCSU) <input type="checkbox"/> History Education (DSU, MaSU, MiSU, NDSU, UJ, UM, VCSU) <input type="checkbox"/> Math Education (DSU, MaSU, MiSU, NDSU, UJ, UM, VCSU) <input type="checkbox"/> Middle Level Education (UND) <input type="checkbox"/> Music Education (DSU, MiSU, UJ, UM, UND, VCSU) <input type="checkbox"/> Native American Studies (NHSC, SBC) <input type="checkbox"/> Physical Educ. (DSU, MaSU, MiSU, NDSU, TBC, UJ, UM, VCSU) <input type="checkbox"/> Physics Education (NDSU) <input type="checkbox"/> Science Education (SBC, TMCC, UND) <input type="checkbox"/> Social Science Education (DSU, MaSU, MiSU, UM, UND, VCSU) <input type="checkbox"/> Spanish Education (NDSU) <input type="checkbox"/> Special Education (MaSU, MiSU, UM) <input type="checkbox"/> Teacher Education (UJ) <input type="checkbox"/> Technology Education (DSU, VCSU) | <input type="checkbox"/> Agriculture Education (NDSU) <input type="checkbox"/> Curriculum and Instruction (NDSU, SBC, UJ, UM, UND) <input type="checkbox"/> Early Childhood Education (UND) <input type="checkbox"/> Education (MiSU, NDSU, UM, VCSU) <input type="checkbox"/> Educational Foundations and Research (UND) <input type="checkbox"/> Education Leadership (NDSU, UND) <input type="checkbox"/> Education Studies (UND) <input type="checkbox"/> Elementary Education (UND, VCSU) <input type="checkbox"/> English Education (NDSU, VCSU) <input type="checkbox"/> English Language Learner (ELL) Education (VCSU) <input type="checkbox"/> Extension Education (NDSU) <input type="checkbox"/> Family & Consumer Sciences Education (NDSU) <input type="checkbox"/> Higher Education (UND) <input type="checkbox"/> History Education (NDSU) <input type="checkbox"/> Instructional Design and Technology (UND) <input type="checkbox"/> Mathematics Education (NDSU, UND) <input type="checkbox"/> Music Education (MiSU, NDSU, UND) <input type="checkbox"/> Reading Education (UM, UND) <input type="checkbox"/> Science Education (NDSU) <input type="checkbox"/> Social Science Education (NDSU) <input type="checkbox"/> Special Education (MiSU, UM, UND) <input type="checkbox"/> Teaching (DSU, MaSU, VCSU) <input type="checkbox"/> Teaching and Learning (UND) <input type="checkbox"/> Teaching Technology (VCSU) <input type="checkbox"/> Technology Education (VCSU) |

North Dakota Postsecondary Institutions Offering Education & Training Related Programs

| | | | | | |
|--------------|------------------------------------|--------------------------------------------------------------------|-------------|-----------------------------------|------------------------------------------------------------------------------|
| BSC | Bismarck State College | www.bismarckstate.edu | RU | Rasmussen University | www.rasmussen.edu |
| CCCC | Cankdeska Cikana Community College | www.littlehoop.edu | SBC | Sitting Bull College | www.sittingbull.edu |
| DCB | Dakota College at Bottineau | www.dakotacollege.edu | TBC | Trinity Bible College | www.trinitybiblecollege.edu |
| DSU | Dickinson State University | www.dickinsonstate.edu | TMCC | Turtle Mountain Community College | www.tm.edu |
| LRSC | Lake Region State College | www.lrsc.edu | UTTC | United Tribes Technical College | www.uttcc.edu |
| MaSU | Mayville State University | www.mayvillestate.edu | UJ | University of Jamestown | www.uj.edu |
| MiSU | Minot State University | www.minotstateu.edu | UM | University of Mary | www.umary.edu |
| NDSCS | ND State College of Science | www.ndscs.edu | UND | University of North Dakota | www.und.edu |
| NDSU | ND State University | www.ndsu.edu | VCSU | Valley City State University | www.vcsu.edu |
| NHSC | Nueta Hidatsa Sahnish College | http://nhsc.edu | WSC | Williston State College | www.willistonstate.edu |



Name _____

Finance Career Cluster

| Pathway | OCCUPATIONS RELATING TO THIS CAREER CLUSTER |
|-------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Accounting | Accountant • Auditor • Billing and Posting Clerk • Bookkeeper • Financial Manager • Payroll Clerk • Tax Auditor |
| Banking Services | Credit Analyst • Loan Officer • Title Examiner/Searcher • Credit Counselor • Teller • Bill Collector • New Accounts Clerk • Loan Officer |
| Business Finance | Financial Analyst • Cost Estimator • Purchasing Agent • Budget Analyst • Fraud Examiner and Investigator • Financial Manager |
| Insurance | Actuary • Insurance Sales Agent • Claims Clerk • Benefits Consultant • Claims Clerk • Loss Prevention Manager • Insurance Appraiser |
| Securities & Investments | Personal Financial Advisor • Tax Preparer • Securities/Commodities Sales Agent • Investment Fund Manager • Compliance Manager • Risk Management Specialist |

| HIGH SCHOOL COURSE REQUIREMENTS | | | | |
|--------------------------------------------------------------------------------------------|-------------------------------------------------|---------------------------------------------------------|----------------------------------------------------------------------|---------------------------------------------------------------------|
| English Four units required to graduate; including literature, composition, and speech. | Math Three units required to graduate | Science Three units required to graduate. | Social Studies Three units required to graduate. | Physical Education One unit required to graduate. |
| Choices may include: | Choices may include: | Required Units: | Required Units: | Required Units: |
| <input type="checkbox"/> English 9 05071 | <input type="checkbox"/> Algebra I 11031 | <input type="checkbox"/> Physical Science 13030 | <input type="checkbox"/> U.S. History 15085 | <input type="checkbox"/> Physical Education 1 unit 08030 |
| <input type="checkbox"/> English 10 05072 | <input type="checkbox"/> Geometry 11120 | <input type="checkbox"/> Biology 13020 | <input type="checkbox"/> American Government ½ unit AND 15111 | OR |
| <input type="checkbox"/> English 11 05073 | <input type="checkbox"/> Advanced Algebra 11032 | <input type="checkbox"/> One additional unit of Science | <input type="checkbox"/> Economics ½ unit 15060 | <input type="checkbox"/> Physical Education ½ unit AND 08030 |
| <input type="checkbox"/> English 12 05074 | | OR | OR | <input type="checkbox"/> Health ½ unit 18010 |
| | | <input type="checkbox"/> Biology 13020 | <input type="checkbox"/> Problems of Democracy 1 unit 15201 | |
| | | <input type="checkbox"/> Chemistry 13031 | | |
| | | <input type="checkbox"/> Physics 13042 | Additional units may include: | |
| | | | <input type="checkbox"/> Civics | |
| | | | <input type="checkbox"/> Geography | |
| | | | <input type="checkbox"/> Psychology | |
| | | | <input type="checkbox"/> World History | |

| Career & Technical Education Electives Three units of foreign or Native American language, fine arts, or career and technical education are required to graduate. | | | Extended Learning Opportunities | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------|--|------------------------------------------------------|---------------------------------------------------|
| Business Education | Family and Consumer Sciences Education | | School-Based: | Community Based: |
| <input type="checkbox"/> Accounting I 14010 | <input type="checkbox"/> Consumer & Resource Management 09028 | | <input type="checkbox"/> FBLA | <input type="checkbox"/> Mentorship |
| <input type="checkbox"/> Accounting II 14011 | | | <input type="checkbox"/> DECA | <input type="checkbox"/> Volunteer |
| <input type="checkbox"/> Accounting III 14012 | Marketing Education | | <input type="checkbox"/> FFA | <input type="checkbox"/> Part-time Employment |
| <input type="checkbox"/> Accounting IV 14013 | <input type="checkbox"/> Principles of Marketing 04080 | | <input type="checkbox"/> FCCLA | <input type="checkbox"/> Service-Learning Project |
| <input type="checkbox"/> Forensic Accounting 14014 | <input type="checkbox"/> Principles of Finance 04081 | | <input type="checkbox"/> TSA | <input type="checkbox"/> Job Shadow |
| <input type="checkbox"/> Entrepreneurial Accounting 14015 | <input type="checkbox"/> Business Finance 04082 | | <input type="checkbox"/> SkillsUSA | <input type="checkbox"/> Internship |
| <input type="checkbox"/> Business Communication 14060 | | | <input type="checkbox"/> Career Research | |
| <input type="checkbox"/> Business Finance 14016 | | | <input type="checkbox"/> Cooperative Work Experience | |
| <input type="checkbox"/> Business Fundamentals 14230 | | | | |
| <input type="checkbox"/> Business Law 14090 | | | | |
| <input type="checkbox"/> Business Computer Applications 14024 | | | | |
| <input type="checkbox"/> Financial Literacy 14095 | | | | |
| | | | | |

North Dakota Finance Related Postsecondary Programs

| Pathway | Certificate or Associate's Degree | Bachelor's Degree | Master's Degree or More |
|-------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|
| Accounting | <input type="checkbox"/> Accounting (DCB, DSU, RU, WSC) <input type="checkbox"/> Accounting transfer (BSC) <input type="checkbox"/> Business Administration (CCCC, UTTC) <input type="checkbox"/> Accounting Technician (DCB, DSU, TMCC) | <input type="checkbox"/> Accounting (DSU, MiSU, NDSU, RU, UJ, UM, UND) <input type="checkbox"/> Business Administration (DSU, MaSU, NDSU, SBC, TBC, UTTC, UJ, UM, VCSU) <input type="checkbox"/> Managerial Finance and Accounting (UND) | <input type="checkbox"/> Accountancy (NDSU, UND) <input type="checkbox"/> Business Administration (NDSU) |
| Banking Services | <input type="checkbox"/> Economics transfer (BSC, DCB) | <input type="checkbox"/> Banking and Financial Economics (UND) <input type="checkbox"/> Financial Services and Banking (UM) <input type="checkbox"/> Economics (NDSU, UND) | <input type="checkbox"/> Applied Economics (UND) |
| Business Finance | <input type="checkbox"/> Business Administration transfer (BSC, CCCC, DCB, LRSC, NDSCS, NHSC, SBC, TBC, UTTC) <input type="checkbox"/> Business Finance (DCB, NDSCS) <input type="checkbox"/> Business Management (MaSU, NDSCS, RU, WSC) | <input type="checkbox"/> Business Administration (DSU, MaSU, NDSU, SBC, TBC, UTTC, UJ, UM, VCSU) <input type="checkbox"/> Business Management (RU) <input type="checkbox"/> Energy Economics and Finance (MiSU) <input type="checkbox"/> Finance (MiSU, NDSU, RU) | <input type="checkbox"/> Business Administration (NDSU) |
| Insurance | <input type="checkbox"/> Insurance (BSC) <input type="checkbox"/> Marketing (LRSC, RU) <input type="checkbox"/> Marketing and Management transfer (DCB) | <input type="checkbox"/> Marketing (MiSU, NDSU, RU, UM, UND) | |
| Securities & Investments | | <input type="checkbox"/> Financial Planning and Wealth Management (UJ) <input type="checkbox"/> Investments (UND) | |

North Dakota Postsecondary Institutions Offering Finance Related Programs

| | | | | | |
|--------------|------------------------------------|--------------------------------------------------------------------|-------------|-----------------------------------|------------------------------------------------------------------------------|
| BSC | Bismarck State College | www.bismarckstate.edu | RU | Rasmussen University | www.rasmussen.edu |
| CCCC | Cankdeska Cikana Community College | www.littlehoop.edu | SBC | Sitting Bull College | www.sittingbull.edu |
| DCB | Dakota College at Bottineau | www.dakotacollege.edu | TBC | Trinity Bible College | www.trinitybiblecollege.edu |
| DSU | Dickinson State University | www.dickinsonstate.edu | TMCC | Turtle Mountain Community College | www.tm.edu |
| LRSC | Lake Region State College | www.lrsc.edu | UTTC | United Tribes Technical College | www.uttcc.edu |
| MaSU | Mayville State University | www.mayvillestate.edu | UJ | University of Jamestown | www.uj.edu |
| MiSU | Minot State University | www.minotstateu.edu | UM | University of Mary | www.umary.edu |
| NDSCS | ND State College of Science | www.ndscs.edu | UND | University of North Dakota | www.und.edu |
| NDSU | ND State University | www.ndsu.edu | VCSU | Valley City State University | www.vcsu.edu |
| NHSC | Nueta Hidatsa Sahnish College | www.nhsc.edu | WSC | Williston State College | www.willistonstate.edu |



Name _____

Government & Public Administration Career Cluster

| Pathway | OCCUPATIONS RELATING TO THIS CAREER CLUSTER |
|-----------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Foreign Service | Ambassador • Consular Officer • Administrative Officer • Economic Officer • Diplomatic Courier • Public Affairs Officer • Foreign Service Officer |
| Governance | Representative (Federal/State) • Senate (Federal/State) • Congressional Aide • Lobbyist • Policy Advisor • Legislative Aide • Mayor • Chief of Staff • Commissioner |
| National Security | National Security Advisor • Intelligence Analyst • Cryptographer • Intelligence/Counter Intelligence Agent • Aircraft Pilot/Crew • Submarine Officer |
| Planning | Chief of Vital Statistics • Economic Development Coordinator • Management Analyst • Commissioner • Census Clerk • County Director |
| Public Management & Administration | City Manager • City Council Member • Court Administrator • Chamber of Commerce Officer • City/County Clerk • Executive Director of a Foundation/Association |
| Regulation | Equal Opportunity Officer • Cargo Inspector • Bank Examiner • Border Inspector • Election Supervisor • Immigration Officer • Enforcement Specialist |
| Revenue & Taxation | Assessor • Tax Examiner (State, County, City) • Revenue Agent • Internal Revenue Investigator • Inspector General • Tax Policy Analyst |

| HIGH SCHOOL COURSE REQUIREMENTS | | | | |
|--------------------------------------------------------------------------------------------|-------------------------------------------------|---------------------------------------------------------|----------------------------------------------------------------------|---------------------------------------------------------------------|
| English Four units required to graduate; including literature, composition, and speech. | Math Three units required to graduate | Science Three units required to graduate. | Social Studies Three units required to graduate. | Physical Education One unit required to graduate. |
| Choices may include: | Choices may include: | Required Units: | Required Units: | Required Units: |
| <input type="checkbox"/> English 9 05071 | <input type="checkbox"/> Algebra I 11031 | <input type="checkbox"/> Physical Science 13030 | <input type="checkbox"/> U.S. History 15085 | <input type="checkbox"/> Physical Education 1 unit 08030 |
| <input type="checkbox"/> English 10 05072 | <input type="checkbox"/> Geometry 11120 | <input type="checkbox"/> Biology 13020 | <input type="checkbox"/> American Government ½ unit AND 15111 | OR |
| <input type="checkbox"/> English 11 05073 | <input type="checkbox"/> Advanced Algebra 11032 | <input type="checkbox"/> One additional unit of Science | <input type="checkbox"/> Economics ½ unit 15060 | <input type="checkbox"/> Physical Education ½ unit AND 08030 |
| <input type="checkbox"/> English 12 05074 | | OR | OR | <input type="checkbox"/> Health ½ unit 18010 |
| | | <input type="checkbox"/> Biology 13020 | <input type="checkbox"/> Problems of Democracy 1 unit 15201 | |
| | | <input type="checkbox"/> Chemistry 13031 | | |
| | | <input type="checkbox"/> Physics 13042 | Additional units may include: | |
| | | | <input type="checkbox"/> Civics | |
| | | | <input type="checkbox"/> Geography | |
| | | | <input type="checkbox"/> Psychology | |
| | | | <input type="checkbox"/> World History | |

| Career and Technical Education Electives Three units of foreign or Native American language, fine arts, or career and technical education are required to graduate. | | | Extended Learning Opportunities | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------|------------------------------------------------------|---------------------------------------------------|--|
| Agriculture Education | Information Technology Education | School-Based: | Community Based: | |
| <input type="checkbox"/> Community Development 01993 | <input type="checkbox"/> Geographic Information Systems (GIS) 27400 | <input type="checkbox"/> DECA | <input type="checkbox"/> Mentorship | |
| <input type="checkbox"/> World Agricultural Science & Technology 01069 | <input type="checkbox"/> Computer Hardware & Operating Systems (A+) 27219 | <input type="checkbox"/> FBLA | <input type="checkbox"/> Volunteer | |
| | <input type="checkbox"/> Intro to IT 27101 | <input type="checkbox"/> FCCLA | <input type="checkbox"/> Part-time Employment | |
| Business Education | <input type="checkbox"/> IT Essentials 2 27220 | <input type="checkbox"/> FFA | <input type="checkbox"/> Service-Learning Project | |
| <input type="checkbox"/> Communication Technologies 14028 | <input type="checkbox"/> Data Modeling & SQL 27500 | <input type="checkbox"/> SkillsUSA | <input type="checkbox"/> Job Shadow | |
| <input type="checkbox"/> Financial Literacy 14095 | | <input type="checkbox"/> TSA | <input type="checkbox"/> Internship | |
| <input type="checkbox"/> Management I 14231 | Marketing Education | <input type="checkbox"/> Career Research | | |
| <input type="checkbox"/> Management II 14232 | <input type="checkbox"/> Principles of Finance 04081 | <input type="checkbox"/> Cooperative Work Experience | | |
| <input type="checkbox"/> Global Management 14233 | <input type="checkbox"/> International Marketing 04310 | | | |
| <input type="checkbox"/> Business Law 14090 | | | | |
| <input type="checkbox"/> Forensic Accounting 14014 | Technology and Engineering Education | | | |
| | <input type="checkbox"/> Foundations of Technology 10094 | | | |
| Family & Consumer Sciences Education | <input type="checkbox"/> Technological Design 10410 | | | |
| <input type="checkbox"/> Food Science & Technology 09138 | <input type="checkbox"/> Technology & Society 10096 | | | |
| <input type="checkbox"/> Consumer & Resource Management 09028 | | | | |

North Dakota Government & Public Administration Related Postsecondary Programs

| Pathway | Certificate or Associate's Degree | Bachelor's Degree | Master's Degree or More |
|------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Foreign Service | <input type="checkbox"/> American Sign Language and Interpreting Studies (LRSC) <input type="checkbox"/> Foreign Language transfer (BSC) | <input type="checkbox"/> Chinese Studies (UND) <input type="checkbox"/> Foreign Language (MiSU) <input type="checkbox"/> French (NDSU, UJ, UND) <input type="checkbox"/> German (UJ, UND) <input type="checkbox"/> International Studies (UND) <input type="checkbox"/> Modern Languages (NDSU) <input type="checkbox"/> Norwegian (UND) <input type="checkbox"/> Spanish (DSU, NDSU, UJ, UM, UND) | |
| Governance | <input type="checkbox"/> Dakota Studies (CCCC) <input type="checkbox"/> History transfer (BSC, DCB) <input type="checkbox"/> Native American Studies (SBC) <input type="checkbox"/> Political Science transfer (BSC) | <input type="checkbox"/> American Indian Studies (UND) <input type="checkbox"/> History (DSU, MiSU, NDSU, UJ, UM, UND, VCSU) <input type="checkbox"/> Native American Studies (NHSC, SBC) <input type="checkbox"/> Political Science (DSU, NDSU, UJ, UND) <input type="checkbox"/> Politics (UM) <input type="checkbox"/> Public Affairs (UND) <input type="checkbox"/> Public History (NDSU) | <input type="checkbox"/> History (NDSU, UND) <input type="checkbox"/> Public Administration (UM, UND) <input type="checkbox"/> Public Health (NDSU, UND) |
| National Security | <input type="checkbox"/> Cybersecurity and Computer Networks (BSC) <input type="checkbox"/> Military Science (BSC) | <input type="checkbox"/> Cybersecurity and Information Technology (BSC) <input type="checkbox"/> Military Science/ROTC (NDSU, UND) <input type="checkbox"/> Unmanned Aircraft System Operations (UND) | <input type="checkbox"/> Unmanned Aerial Systems Engineering (UND) |
| Planning | <input type="checkbox"/> Economics transfer (BSC, DCB) | <input type="checkbox"/> Behavioral Statistics (NDSU) <input type="checkbox"/> Economics (NDSU, UND) <input type="checkbox"/> Energy Economics and Finance (MiSU) | <input type="checkbox"/> Community Development (NDSU) <input type="checkbox"/> Transportation and Urban Systems (NDSU) |
| Public Management & Administration | <input type="checkbox"/> Cybersecurity and Information Technology (BSC) <input type="checkbox"/> Emergency Management transfer (NDSCS) <input type="checkbox"/> Land Management (DCB) | <input type="checkbox"/> Cybersecurity (RU) <input type="checkbox"/> Cybersecurity and Information Technology (BSC) <input type="checkbox"/> Emergency Management (NDSU) <input type="checkbox"/> Public Health Education (UND) <input type="checkbox"/> Strategic Communication (NDSU) | <input type="checkbox"/> Emergency Management (NDSU) |
| Regulation | | <input type="checkbox"/> Public History (NDSU) | |
| Revenue & Taxation | <input type="checkbox"/> Accounting transfer (BSC, DCB, TMCC) <input type="checkbox"/> Accounting Technology (DCB, DSU, RU, TMCC) | <input type="checkbox"/> Accounting (DSU, MiSU, NDSU, RU, UJ, UM, UND) | <input type="checkbox"/> Accountancy (NDSU) |

North Dakota Postsecondary Institutions Offering Government & Public Administration Related Programs

| | | | | | |
|-------------|------------------------------------|--------------------------------------------------------------------|--------------|---------------------------------------|--------------------------------------------------------------|
| BSC | Bismarck State College | www.bismarckstate.edu | NDSCS | North Dakota State College of Science | www.ndscs.edu |
| CCCC | Cankdeska Cikana Community College | www.littlehoop.edu | RU | Rasmussen University | www.rasmussen.edu |
| DCB | Dakota College at Bottineau | www.dakotacollege.edu | SBC | Sitting Bull College | www.sittingbull.edu |
| DSU | Dickinson State University | www.dickinsonstate.edu | TMCC | Turtle Mountain Community College | www.tm.edu |
| LRSC | Lake Region State College | www.lrsc.edu | UJ | University of Jamestown | www.uj.edu |
| MiSU | Minot State University | www.minotstateu.edu | UM | University of Mary | www.umary.edu |
| NDSU | ND State University | www.ndsu.edu | UND | University of North Dakota | www.und.edu |
| NHSC | Nueta Hidatsa Sahnish College | http://nhsc.edu | VCSU | Valley City State University | www.vcsu.edu |



Name _____

Health Science Career Cluster

| Pathway | OCCUPATIONS RELATING TO THIS CAREER CLUSTER |
|-------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Biotechnology Research & Development | Research Scientist/Assistant • Microbiologist • Biostatistician • Cell Biologist • Biomedical Chemist • Geneticist • Genetics Lab Assistant • Quality Assurance Technician |
| Diagnostic Services | Clinical Lab Technician • Phlebotomist • Geneticist • Nutritionist • Magnetic Resonance (MR) Technologist • Radiologist • Pathologist • Exercise Physiologist |
| Health Informatics | Health Information Coder • Admitting Clerk • Transcriptionist • Medical Librarian • Public Health Educator • Ethicist • Medical Assistant • Epidemiologist |
| Support Services | Dietary Aide • Hospital Maintenance Engineer • Environmental Services Manager • Industrial Hygienist • Biomedical Engineer • Transport Technician |
| Therapeutic Services | Dental Assistant/Hygienist • Occupational Therapist • EMT/Paramedic • Physician • Licensed Practical Nurse • Veterinarian • Social Worker • Massage Therapist |

| HIGH SCHOOL COURSE REQUIREMENTS | | | | |
|--------------------------------------------------------------------------------------------|-------------------------------------------------|---------------------------------------------------------|----------------------------------------------------------------------|---------------------------------------------------------------------|
| English Four units required to graduate; including literature, composition, and speech. | Math Three units required to graduate | Science Three units required to graduate. | Social Studies Three units required to graduate. | Physical Education One unit required to graduate. |
| Choices may include: | Choices may include: | Required Units: | Required Units: | Required Units: |
| <input type="checkbox"/> English 9 05071 | <input type="checkbox"/> Algebra I 11031 | <input type="checkbox"/> Physical Science 13030 | <input type="checkbox"/> U.S. History 15085 | <input type="checkbox"/> Physical Education 1 unit 08030 |
| <input type="checkbox"/> English 10 05072 | <input type="checkbox"/> Geometry 11120 | <input type="checkbox"/> Biology 13020 | <input type="checkbox"/> American Government ½ unit AND 15111 | OR |
| <input type="checkbox"/> English 11 05073 | <input type="checkbox"/> Advanced Algebra 11032 | <input type="checkbox"/> One additional unit of Science | <input type="checkbox"/> Economics ½ unit 15060 | <input type="checkbox"/> Physical Education ½ unit AND 08030 |
| <input type="checkbox"/> English 12 05074 | | OR | OR | <input type="checkbox"/> Health ½ unit 18010 |
| | | <input type="checkbox"/> Biology 13020 | <input type="checkbox"/> Problems of Democracy 1 unit 15201 | |
| | | <input type="checkbox"/> Chemistry 13031 | | |
| | | <input type="checkbox"/> Physics 13042 | Additional units may include: | |
| | | | <input type="checkbox"/> Civics | |
| | | | <input type="checkbox"/> Geography | |
| | | | <input type="checkbox"/> Psychology | |
| | | | <input type="checkbox"/> World History | |

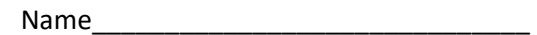
| Career and Technical Education Electives Three units of foreign or Native American language, fine arts, or career and technical education are required to graduate. | | | Extended Learning Opportunities | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------|------------------------------------------------------|---------------------------------------------------|
| Health Science Education | | Business Education | School-Based: | Community Based: |
| <input type="checkbox"/> Nurse Assistant 07032 | | <input type="checkbox"/> Business Computer Applications 14024 | <input type="checkbox"/> SkillsUSA | <input type="checkbox"/> Mentorship |
| <input type="checkbox"/> Health Careers I 07033 | | <input type="checkbox"/> Business Technology & Procedures 14079 | <input type="checkbox"/> FBLA | <input type="checkbox"/> Volunteer |
| <input type="checkbox"/> Prevention/Care of Athletic Injuries 07034 | | | <input type="checkbox"/> FCCLA | <input type="checkbox"/> Part-time Employment |
| <input type="checkbox"/> Advanced Health Careers 07035 | | Family and Consumer Sciences Education | <input type="checkbox"/> TSA | <input type="checkbox"/> Service-Learning Project |
| <input type="checkbox"/> Medical Terminology 07036 | | <input type="checkbox"/> Individual & Family Health 09129 | <input type="checkbox"/> DECA | <input type="checkbox"/> Job Shadow |
| <input type="checkbox"/> Emergency Medical Services 07045 | | <input type="checkbox"/> Nutrition and Fitness 09137 | <input type="checkbox"/> FFA | <input type="checkbox"/> Internship |
| <input type="checkbox"/> Advanced EMS 07046 | | | <input type="checkbox"/> Career Research | |
| | | Technology and Engineering Education | <input type="checkbox"/> Cooperative Work Experience | |
| | | <input type="checkbox"/> STEM Seminar 10610 | | |
| Agriculture Education | | <input type="checkbox"/> Biomedical Technology 10710 | | |
| <input type="checkbox"/> Veterinary Science 01067 | | <input type="checkbox"/> PLTW – Principles of Biomedical Science 10730 | | |
| <input type="checkbox"/> Small Animal Care 01066 | | <input type="checkbox"/> PLTW – Principles of Human Body Systems 10732 | | |
| <input type="checkbox"/> Equine Science 01062 | | <input type="checkbox"/> PLTW – Principles of Medical Interventions 10734 | | |
| <input type="checkbox"/> Livestock Production 01061 | | | | |

North Dakota Health Science Related Postsecondary Programs

| Pathway | Certificate or Associate's Degree | Bachelor's Degree | Master's Degree or More |
|-------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Biotechnology Research & Development | <input type="checkbox"/> Biotechnology transfer (NDSCS) | <input type="checkbox"/> Bioinformatics (MiSU) <input type="checkbox"/> Biotechnology (NDSU) | <input type="checkbox"/> Bioethics (UM) <input type="checkbox"/> Biomedical Sciences (UND) <input type="checkbox"/> Genomics and Bioinformatics (NDSU) |
| Diagnostic Services | <input type="checkbox"/> Clinical Laboratory Science transfer (NDSCS) <input type="checkbox"/> EMT-Paramedic Technician (BSC, DCB, NDSCS) <input type="checkbox"/> Medical Assistant (DCB, RU) <input type="checkbox"/> Medical Laboratory Science/Technician (BSC, RU, TMCC) <input type="checkbox"/> Phlebotomy Technician (BSC, TMCC) <input type="checkbox"/> Speech Language Pathology Paraprofessional (WSC) | <input type="checkbox"/> Communication Sciences & Disorders (MiSU, UM, UND) <input type="checkbox"/> Medical Lab Science (MaSU, MiSU, NDSU, UJ, UM, UND, VCSU) <input type="checkbox"/> Radiologic Science/Technology (MiSU, NDSU, UM) | <input type="checkbox"/> Medical Lab Science (UND) |
| Health Informatics | <input type="checkbox"/> Community Health (SBC) <input type="checkbox"/> Health Information Technician/Management (DCB, NDSCS, RU) <input type="checkbox"/> Medical Administrative Asst. (BSC, DCB, RU) <input type="checkbox"/> Medical Coding/Billing (DCB, NDSCS, RU) | <input type="checkbox"/> Forensic Science (UND) <input type="checkbox"/> Health Science (MaSU) <input type="checkbox"/> Health Information Management (RU) <input type="checkbox"/> Forensic Science (UND) <input type="checkbox"/> Human Nutrition (UND) | <input type="checkbox"/> Health Care Administration/Management (RU, UM) <input type="checkbox"/> Public Health (NDSU, UND) |
| Support Services | <input type="checkbox"/> Caregiver Services (DCB) <input type="checkbox"/> Health/Fitness Personal Trainer Technician (LRSC, TMCC) <input type="checkbox"/> Patient Access Specialist (TMCC) <input type="checkbox"/> Pharmacy Technician (NDSCS, RU) <input type="checkbox"/> Physical Therapist Assistant (RU) <input type="checkbox"/> Radiologic Technology (RU) | <input type="checkbox"/> Biomechanics (UM) <input type="checkbox"/> Fitness and Wellness (MaSU) <input type="checkbox"/> Exercise Science (DSU, NDSU, TBC, UJ, UM) <input type="checkbox"/> Exercise Science and Sport Management (VCSU) <input type="checkbox"/> Kinesiology (UND) <input type="checkbox"/> Sport Management (MaSU, NDSU, UM) | <input type="checkbox"/> Clinical Exercise Physiology (UM) <input type="checkbox"/> Kinesiology (UM, UND) <input type="checkbox"/> Kinesiology & Public Health Education (UND) |
| Therapeutic Services | <input type="checkbox"/> Dental Assisting or Dental Hygiene (NDSCS) <input type="checkbox"/> Health/Medical Assistant (BJCC, DCB) <input type="checkbox"/> Massage Therapy (JSHDF, JSHDGF, TSPA, WSC) <input type="checkbox"/> Nursing (BSC, CCCC, DCB, LRSC, NDSCS, SBC, WSC) <input type="checkbox"/> Occupational Therapy Assistant (NDSCS) <input type="checkbox"/> Practical Nursing (BSC, DCB, DSU, LRSC, NDSCS, SBC, WSC) <input type="checkbox"/> Pre-Professional transfer (BSC, DCB, NDSCS, WSC) <input type="checkbox"/> Surgical Technology (BSC, RU) | <input type="checkbox"/> Addiction Studies (MiSU) <input type="checkbox"/> Athletic Training (UND) <input type="checkbox"/> Corporate Fitness and Wellness Mgmt. (MiSU) <input type="checkbox"/> Dietetics (NDSU, UND) <input type="checkbox"/> Nursing (DSU, MaSU, MiSU, NDSU, RU, UJ, UM, UND) <input type="checkbox"/> Pharmacy (NDSU) <input type="checkbox"/> Pre-Professional programs (MaSU, MiSU, NDSU, UJ, UM, UND) <input type="checkbox"/> Rehabilitation and Human Services (UND) <input type="checkbox"/> Respiratory Care/Therapy (NDSU, UM) | <input type="checkbox"/> Athletic Training (UM) <input type="checkbox"/> Dietetics (NDSU, UND) <input type="checkbox"/> Family Nurse Practitioner (UND) <input type="checkbox"/> Health, Nutrition and Exercise Science (NDSU) <input type="checkbox"/> Medicine (UND) <input type="checkbox"/> Nursing (RU, UM, UND) <input type="checkbox"/> Occupational Therapy (UND) <input type="checkbox"/> Pharmaceutical Sciences (NDSU) <input type="checkbox"/> Physical Therapy (UJ, UND) <input type="checkbox"/> Physician Assistant Studies (UND) <input type="checkbox"/> Respiratory Therapy (UM) |

North Dakota Postsecondary Institutions Offering Health Science Related Programs

| | | | | | |
|---------------|---------------------------------------------|---------------------------------------------------------------------------------------|-------------|-----------------------------------|------------------------------------------------------------------------------|
| BSC | Bismarck State College | www.bismarckstate.edu | NDSU | ND State University | www.ndsu.edu |
| BJCC | Burdick Job Corps Center | http://quentinnburdick.jobcorps.gov | RU | Rasmussen University | www.rasmussen.edu |
| CCCC | Cankdeska Cikana Community College | www.littlehoop.edu | SBC | Sitting Bull College | www.sittingbull.edu |
| DCB | Dakota College at Bottineau | www.dakotacollege.edu | TBC | Trinity Bible College | www.trinitybiblecollege.edu |
| DSU | Dickinson State University | www.dickinsonstate.edu | TSPA | The Salon Professional Academy | www.tspafargo.com |
| JSHDF | Josef's School of Hair Design - Fargo | josefsschoolofhairdesign.com | TMCC | Turtle Mountain Community College | www.tm.edu |
| JSHDGF | Josef's School of Hair Design – Grand Forks | josefsschoolofhairdesign.com | UM | University of Mary | www.umary.edu |
| LRSC | Lake Region State College | www.lrsc.edu | UND | University of North Dakota | www.und.edu |
| MaSU | Mayville State University | www.mayvillestate.edu | VCSU | Valley City State University | www.vcsu.edu |
| MiSU | Minot State University | www.minotstateu.edu | WSC | Williston State College | www.willistonstate.edu |
| NDSCS | ND State College of Science | www.ndscs.edu | | | |



Hospitality & Tourism Career Cluster

| Pathway | OCCUPATIONS RELATING TO THIS CAREER CLUSTER |
|--------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Lodging | Front Office Manager • Lodging Manager • Food and Beverage Director • Front Desk Employee • Executive Housekeeper • Concierge • Reservation Manager |
| Recreation, Amusements & Attractions | Facilities Manager • Gaming and Casino Manager • Parks Ranger • Sports Promoter • Theme Park Personnel • Equipment Operators • Security and Safety Personnel |
| Restaurant & Food/Beverage Services | Executive Chef • General Manager • Catering and Banquet Manager • Food and Beverage Manager • Maitre d' • Pastry and Specialty Chef |
| Travel & Tourism | Convention Services Manager • Destination Manager • Meeting Planner • Travel Agent • Tourism Marketing Specialist • Interpreter • Tour & Travel Guide |

HIGH SCHOOL COURSE REQUIREMENTS

| English | | | Math | | | Science | | | Social Studies | | | Physical Education | | |
|---------------------------------------------------------------------------------|------------|-------|----------------------------------|------------------|-------|-----------------------------------|--------------------------------|-------|--------------------------------------|---------------------------------------|-------|--------------------------------|--------------------------------------|-------|
| Four units required to graduate; including literature, composition, and speech. | | | Three units required to graduate | | | Three units required to graduate. | | | Three units required to graduate. | | | One unit required to graduate. | | |
| Choices may include: | | | Choices may include: | | | Required Units: | | | Required Units: | | | Required Units: | | |
| <input type="checkbox"/> | English 9 | 05071 | <input type="checkbox"/> | Algebra I | 11031 | <input type="checkbox"/> | Physical Science | 13030 | <input type="checkbox"/> | U.S. History | 15085 | <input type="checkbox"/> | Physical Education 1 unit | 08030 |
| <input type="checkbox"/> | English 10 | 05072 | <input type="checkbox"/> | Geometry | 11120 | <input type="checkbox"/> | Biology | 13020 | <input type="checkbox"/> | American Government ½ unit AND | 15111 | OR | | |
| <input type="checkbox"/> | English 11 | 05073 | <input type="checkbox"/> | Advanced Algebra | 11032 | <input type="checkbox"/> | One additional unit of Science | | <input type="checkbox"/> | Economics ½ unit | 15060 | <input type="checkbox"/> | Physical Education ½ unit AND | 08030 |
| <input type="checkbox"/> | English 12 | 05074 | | | | OR | | | OR | | | <input type="checkbox"/> | Health ½ unit | 18010 |
| | | | | | | <input type="checkbox"/> | Biology | 13020 | <input type="checkbox"/> | Problems of Democracy 1 unit | 15201 | | | |
| | | | | | | <input type="checkbox"/> | Chemistry | 13031 | | | | | | |
| | | | | | | <input type="checkbox"/> | Physics | 13042 | Additional units may include: | | | | | |
| | | | | | | | | | <input type="checkbox"/> | Civics | | | | |
| | | | | | | | | | <input type="checkbox"/> | Geography | | | | |
| | | | | | | | | | <input type="checkbox"/> | Psychology | | | | |
| | | | | | | | | | <input type="checkbox"/> | World History | | | | |

Career and Technical Education Electives

Three units of foreign or Native American language, fine arts, or career and technical education are required to graduate.

Extended Learning Opportunities

| Three units of foreign or Native American language, fine arts, or career and technical education are required to graduate. | | | | | |
|----------------------------------------------------------------------------------------------------------------------------|----------------------------------------|---------------------------------------|--------------------------------------------------------|--------------------------|-----------------------------|
| Business Education | | Health Science Education | | School-Based: | |
| <input type="checkbox"/> | Accounting I 14010 | <input type="checkbox"/> | Emergency Medical Services 07045 | <input type="checkbox"/> | DECA |
| <input type="checkbox"/> | Accounting II 14011 | <input type="checkbox"/> | Prevention/Care of Athletic Injuries 07034 | <input type="checkbox"/> | FBLA |
| <input type="checkbox"/> | Business Fundamentals 14230 | | | <input type="checkbox"/> | FCCLA |
| <input type="checkbox"/> | Business Law 14090 | | | <input type="checkbox"/> | Skills USA |
| <input type="checkbox"/> | Business Technology & Procedures 14079 | Marketing Education | | <input type="checkbox"/> | FFA |
| <input type="checkbox"/> | Business Communication 14060 | <input type="checkbox"/> | Principles of Marketing 04080 | <input type="checkbox"/> | TSA |
| <input type="checkbox"/> | Financial Literacy 14095 | <input type="checkbox"/> | Management 04223 | <input type="checkbox"/> | Career Research |
| <input type="checkbox"/> | Management I 14231 | <input type="checkbox"/> | Principles of Sports and Entertainment Marketing 04239 | <input type="checkbox"/> | Cooperative Work Experience |
| <input type="checkbox"/> | Management II 14232 | <input type="checkbox"/> | International Marketing 04310 | | |
| <input type="checkbox"/> | Operations Management 14234 | <input type="checkbox"/> | Entrepreneurship 04111 | | |
| <input type="checkbox"/> | Web Design 14022 | | | | |
| | | Trade, Industry & Technical Education | | | |
| Family and Consumer Sciences Education | | <input type="checkbox"/> | Culinary Arts I 17050 | | |
| <input type="checkbox"/> | Nutrition & Food Prep I 09131 | <input type="checkbox"/> | Culinary Arts II 17051 | | |
| <input type="checkbox"/> | Cultures & Cuisine 09136 | | | | |
| <input type="checkbox"/> | Food Service/Culinary Arts 09213 | | | | |

North Dakota Hospitality & Tourism Related Postsecondary Programs

| Pathway | Certificate or Associate's Degree | Bachelor's Degree | Master's Degree or More |
|-------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| Lodging | <input type="checkbox"/> Advertising & Marketing (DCB) <input type="checkbox"/> Management (BSC, NDSCS) <input type="checkbox"/> Management Entrepreneurship (BSC) <input type="checkbox"/> Marketing/Management (DCB, LRSC, RU) | <input type="checkbox"/> Hospitality & Tourism Management (NDSU) | |
| Recreation, Amusements & Attractions | <input type="checkbox"/> Advertising & Marketing (DCB) <input type="checkbox"/> Management (BSC) <input type="checkbox"/> Entrepreneurship (NHSC) <input type="checkbox"/> Marketing/Management (DCB, LRSC, RU) <input type="checkbox"/> Sports/Recreation Management (DCB, WSC) <input type="checkbox"/> Theatre Arts transfer (BSC) | <input type="checkbox"/> Apparel, Retail Merchandising and Design (NDSU) <input type="checkbox"/> Sports Management (MaSU, NDSU) <input type="checkbox"/> Sports & Leisure Management (UM) <input type="checkbox"/> Theatre Arts (DSU, NDSU, UND) | <input type="checkbox"/> Merchandising (NDSU) |
| Restaurant & Food/Beverage Services | <input type="checkbox"/> Chef Training and Management Technology (NDSCS) <input type="checkbox"/> Culinary Arts/ Food Service (BJCC, NDSCS, UTTC) <input type="checkbox"/> Entrepreneurship (NHSC) <input type="checkbox"/> Restaurant Management (NDSCS) | <input type="checkbox"/> Dietetics (NDSU, UND) <input type="checkbox"/> Hospitality & Tourism Management (NDSU) | <input type="checkbox"/> Dietetics (NDSU) <input type="checkbox"/> Food Safety (NDSU) <input type="checkbox"/> Nutrition (UND) |
| Travel & Tourism | <input type="checkbox"/> Advertising & Marketing (DCB) <input type="checkbox"/> Entrepreneurship (NHSC) <input type="checkbox"/> Management (BSC) <input type="checkbox"/> Management Entrepreneurship (BSC) <input type="checkbox"/> Marketing/Management (DCB, LRSC, RU) <input type="checkbox"/> Marketing, Sales and Hospitality Services (NDSCS) <input type="checkbox"/> Reception Services (DCB) | <input type="checkbox"/> Chinese Studies (UND) <input type="checkbox"/> Foreign Language (MiSU) <input type="checkbox"/> French (NDSU, UJ, UND) <input type="checkbox"/> German (UJ, UND) <input type="checkbox"/> Intercultural Studies (TBC) <input type="checkbox"/> International Studies (UND) <input type="checkbox"/> Interpreting Sign Language Studies (MiSU) <input type="checkbox"/> Marketing (MiSU, NDSU, RU, UM) <input type="checkbox"/> Modern Languages (NDSU) <input type="checkbox"/> Native American Studies (NHSC) <input type="checkbox"/> Norwegian (UND) <input type="checkbox"/> Spanish (NDSU, UJ, UM, UND) <input type="checkbox"/> Strategic Communication (NDSU) | <input type="checkbox"/> Human Resources Management (RU) |

North Dakota Postsecondary Institutions Offering Hospitality & Tourism Related Programs

| | | | | | |
|--------------|-----------------------------|---------------------------------------------------------------------------------------|-------------|---------------------------------|------------------------------------------------------------------------------|
| BSC | Bismarck State College | www.bismarckstate.edu | NDSU | ND State University | www.ndsu.edu |
| BJCC | Burdick Job Corps Center | http://quentinnburdick.jobcorps.gov | NHSC | Nueta Hidatsa Sahnish College | http://nhsc.edu |
| DCB | Dakota College at Bottineau | www.dakotacollege.edu | RU | Rasmussen University | www.rasmussen.edu |
| DSU | Dickinson State University | www.dickinsonstate.edu | TBC | Trinity Bible College | www.trinitybiblecollege.edu |
| LRSC | Lake Region State College | www.lrsc.edu | UTTC | United Tribes Technical College | www.uttcc.edu |
| MaSU | Mayville State University | www.mayvillestate.edu | UJ | University of Jamestown | www.uj.edu |
| MiSU | Minot State University | www.minotstateu.edu | UM | University of Mary | www.umary.edu |
| NDSCS | ND State College of Science | www.ndscs.edu | UND | University of North Dakota | www.und.edu |



Name _____

Human Services Career Cluster

| Pathway | OCCUPATIONS RELATING TO THIS CAREER CLUSTER |
|---------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| Consumer Services | Customer Service Representative • Financial Advisor • Market Researcher • Consumer Credit Counselor • Certified Financial Planner • Sales Consultant |
| Counseling & Mental Health Services | Career Counselor • Mental Health Counselor • Psychologist • Vocational Rehabilitation Counselor • School Counselor • Sociologist |
| Early Childhood Development & Services | Child Care Worker • Nanny • Preschool Teacher/Teacher Assistant • Child Care Center Director • Parent Educator |
| Family & Community Services | Human Services Worker • Religious Leader • Volunteer Coordinator • Social Worker • Day Care Worker • Emergency Relief Worker • Social Services Worker |
| Personal Care Services | Cosmetologist • Personal Trainer • Personal and Home Care Aide • Funeral Director • Massage Therapist • Exercise Physiologist • Nail Technician |

| HIGH SCHOOL COURSE REQUIREMENTS | | | | |
|--------------------------------------------------------------------------------------------|-------------------------------------------------|---------------------------------------------------------|----------------------------------------------------------------------|---------------------------------------------------------------------|
| English Four units required to graduate; including literature, composition, and speech. | Math Three units required to graduate | Science Three units required to graduate. | Social Studies Three units required to graduate. | Physical Education One unit required to graduate. |
| Choices may include: | Choices may include: | Required Units: | Required Units: | Required Units: |
| <input type="checkbox"/> English 9 05071 | <input type="checkbox"/> Algebra I 11031 | <input type="checkbox"/> Physical Science 13030 | <input type="checkbox"/> U.S. History 15085 | <input type="checkbox"/> Physical Education 1 unit 08030 |
| <input type="checkbox"/> English 10 05072 | <input type="checkbox"/> Geometry 11120 | <input type="checkbox"/> Biology 13020 | <input type="checkbox"/> American Government ½ unit AND 15111 | OR |
| <input type="checkbox"/> English 11 05073 | <input type="checkbox"/> Advanced Algebra 11032 | <input type="checkbox"/> One additional unit of Science | <input type="checkbox"/> Economics ½ unit 15060 | <input type="checkbox"/> Physical Education ½ unit AND 08030 |
| <input type="checkbox"/> English 12 05074 | | OR | OR | <input type="checkbox"/> Health ½ unit 18010 |
| | | <input type="checkbox"/> Biology 13020 | <input type="checkbox"/> Problems of Democracy 1 unit 15201 | |
| | | <input type="checkbox"/> Chemistry 13031 | | |
| | | <input type="checkbox"/> Physics 13042 | Additional units may include: | |
| | | | <input type="checkbox"/> Civics | |
| | | | <input type="checkbox"/> Geography | |
| | | | <input type="checkbox"/> Psychology | |
| | | | <input type="checkbox"/> World History | |

| Career & Technical Education Electives Three units of foreign or Native American language, fine arts, or career and technical education are required to graduate. | | Extended Learning Opportunities | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|------------------------------------------------------|---------------------------------------------------|
| Family & Consumer Sciences Education | Business Education | School-Based: | Community Based: |
| <input type="checkbox"/> Child Development 09026 | <input type="checkbox"/> Business Fundamentals 14230 | <input type="checkbox"/> FCCLA | <input type="checkbox"/> Mentorship |
| <input type="checkbox"/> Consumer & Resource Management 09028 | <input type="checkbox"/> Business Computer Applications 14024 | <input type="checkbox"/> FFA | <input type="checkbox"/> Volunteer |
| <input type="checkbox"/> Individual/Family Health 09129 | <input type="checkbox"/> Financial Literacy 14095 | <input type="checkbox"/> FBLA | <input type="checkbox"/> Part-time Employment |
| <input type="checkbox"/> Early Childhood Care and Education Services 09211 | <input type="checkbox"/> Management I 14231 | <input type="checkbox"/> DECA | <input type="checkbox"/> Service-Learning Project |
| <input type="checkbox"/> Family Living 09132 | | <input type="checkbox"/> TSA | <input type="checkbox"/> Job Shadow |
| <input type="checkbox"/> Parenting 09130 | Health Science Education | <input type="checkbox"/> SkillsUSA | <input type="checkbox"/> Internship |
| <input type="checkbox"/> Nutrition and Fitness 09137 | <input type="checkbox"/> Prevention/Care of Athletic Injuries 07034 | <input type="checkbox"/> Career Research | |
| <input type="checkbox"/> Independent Living 09025 | <input type="checkbox"/> Emergency Medical Services 07045 | <input type="checkbox"/> Cooperative Work Experience | |
| <input type="checkbox"/> Housing and Living Environments 09133 | | | |

North Dakota Human Services Related Postsecondary Programs

| Pathway | Certificate or Associate's Degree | Bachelor's Degree | Master's Degree or More |
|---------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Consumer Services | <input type="checkbox"/> Business transfer (NDSCS) <input type="checkbox"/> Business Administration transfer (BSC, CCCC, DCB, NDSCS, NHSC, SBC, TBC, TMCC, UTTC) <input type="checkbox"/> Business Management (MaSU, RU) | <input type="checkbox"/> Business Administration (DSU, MaSU, NDSU, SBC, TBC, UTTC, UJ, UM, VCSU) <input type="checkbox"/> Management (MiSU, NDSU) | <input type="checkbox"/> Business Administration (NDSU) |
| Counseling & Mental Health Services | <input type="checkbox"/> Psychology transfer (BSC, DCB, NDSCS) | <input type="checkbox"/> Addiction Studies (MiSU) <input type="checkbox"/> Applied Psychology (MaSU) <input type="checkbox"/> Psychology (DSU, MiSU, NDSU, UJ, UM, UND, VCSU) | <input type="checkbox"/> Clinical Counseling (UJ) <input type="checkbox"/> Counseling (NDSU, UM, UND) <input type="checkbox"/> Counseling Psychology (UND) <input type="checkbox"/> Forensic Psychology (UND) <input type="checkbox"/> Clinical Psychology (UND) |
| Early Childhood Development & Services | <input type="checkbox"/> Child Development Associate (DCB) <input type="checkbox"/> Early Childhood (LRSC, NHSC, MaSU) <input type="checkbox"/> Early Childhood Education transfer (BSC, CCCC, DCB, NDSCS, NHSC, SBC, RU) | <input type="checkbox"/> Early Childhood (MaSU, MiSU) <input type="checkbox"/> Early Childhood Education (MaSU, MiSU, RU, SBC, UM, UND) <input type="checkbox"/> Human Development & Family Science (NDSU) | <input type="checkbox"/> Early Childhood Education (UND) <input type="checkbox"/> Human Development & Family Science (NDSU) |
| Family & Community Services | <input type="checkbox"/> Biblical Studies (TBC) <input type="checkbox"/> Caregiver Services (DCB) <input type="checkbox"/> Community Health Worker (SBC) <input type="checkbox"/> Human Services/Eligibility Worker (BSC, SBC) <input type="checkbox"/> Human Services and Social Services (UTTC) <input type="checkbox"/> Human Services transfer (DCB, RU) <input type="checkbox"/> Religion transfer (BSC) <input type="checkbox"/> Social Work transfer (BSC, CCCC, NDSCS, NHSC) | <input type="checkbox"/> Biblical Studies (TBC) <input type="checkbox"/> Catholic Studies (UM) <input type="checkbox"/> Human Development & Family Science (NDSU) <input type="checkbox"/> Human Resources and Organizational Leadership (RU) <input type="checkbox"/> Human Resource Management (UND) <input type="checkbox"/> Human Services (MiSU, RU, VCSU) <input type="checkbox"/> Pastoral Ministry (TBC) <input type="checkbox"/> Rehabilitation and Human Services (UND) <input type="checkbox"/> Religious/Theology/Biblical Studies (UJ, UM, TBC) <input type="checkbox"/> Social Work (MiSU, SBC, UM, UND) <input type="checkbox"/> Worship/Youth/Children's Ministry (TBC) | <input type="checkbox"/> Global Theology (TBC) <input type="checkbox"/> Human Development & Family Science (NDSU) <input type="checkbox"/> Human Resources Management (RU) <input type="checkbox"/> Missional Leadership (TBC) <input type="checkbox"/> Public Health (NDSU, UND) <input type="checkbox"/> Rural Ministries (TBC) <input type="checkbox"/> Social Work (UND) |
| Personal Care Services | <input type="checkbox"/> Fitness Trainer Technician (LRSC) <input type="checkbox"/> Barbering (MBC, SCC) <input type="checkbox"/> Cosmetology (JSHDF, JSHDGF, JSHDW, THA, TSPA) <input type="checkbox"/> Esthetician/Skin Care (JSHDF, JSHDGF, THA, TSPA) <input type="checkbox"/> Massage Therapy (JSHDGF, JSHDW, TSPA, WSC) <input type="checkbox"/> Nail Technology (JSHDGF, THA, TSPA) | <input type="checkbox"/> Athletic Training (UND) <input type="checkbox"/> Coaching and Sport Studies (UM) <input type="checkbox"/> Corporate Fitness and Wellness Management (MiSU) <input type="checkbox"/> Fitness and Wellness (MaSU) <input type="checkbox"/> Exercise Science (DSU, NDSU, TBC, UJ, UM) <input type="checkbox"/> Sport Management (MaSU, NDSU) | <input type="checkbox"/> Advanced Athletic Training (NDSU) <input type="checkbox"/> Clinical Exercise Physiology (UM) <input type="checkbox"/> Exercise/Nutrition Science (NDSU) |

North Dakota Postsecondary Institutions Offering Human Services Related Programs

| | | | | | |
|-------------------|---------------------------------------------------------------|--------------------------------------------------------------------------------|-------------|-----------------------------------|------------------------------------------------------------------------|
| BSC | Bismarck State College | www.bismarckstate.edu | RU | Rasmussen University | www.rasmussen.edu |
| CCCC | Cankdeska Cikana Community College | www.littlehoop.edu | SBC | Sitting Bull College | www.sittingbull.edu |
| DCB | Dakota College at Bottineau | www.dakotacollege.edu | SCC | Skill Cutz Barber College | www.skillcutzcollege.com |
| DSU | Dickinson State University | www.dickinsonstate.edu | THA | The Hair Academy | www.thehairacademynd.com |
| JSHDF/GF/W | Josef's School of Hair Design – Fargo/Grand Forks/West Campus | josefsschoolofhairdesign.com | TSPA | The Salon Professional Academy | www.tspafargo.com |
| LRSC | Lake Region State College | www.lrsc.edu | TMCC | Turtle Mountain Community College | www.tm.edu |
| MaSU | Mayville State University | www.mayvillestate.edu | UTTC | United Tribes Technical College | www.uttcc.edu |
| MiSU | Minot State University | www.minotstateu.edu | UJ | University of Jamestown | www.uj.edu |
| MBC | Moler Barber College | http://molerbarberfargo.com | UM | University of Mary | www.umary.edu |
| NDSCS | ND State College of Science | www.ndscs.edu | UND | University of North Dakota | www.und.edu |
| NDSU | ND State University | www.ndsu.edu | VCSU | Valley City State University | www.vcsu.edu |
| NHSC | Nueta Hidatsa Sahnish College | http://nhsc.edu | WSC | Williston State College | www.willistonstate.edu |



Name _____

Information Technology Career Cluster

| Pathway | OCCUPATIONS RELATING TO THIS CAREER CLUSTER |
|-----------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Information Support & Services | Database Administrator • Account Manager • Help Desk Specialist • Information Systems Architect • Systems Analyst • Instructional Designer • Testing Engineer |
| Network Systems | User Support Specialist • Network Administrator • Network Engineer • Information Technology Engineer • Network Security Analyst • Telecommunications Network Technician |
| Programming & Software Development | Computer Engineer • Software Applications Specialist • Game Developer • Software Applications Tester • Project Lead • Software Design Engineer |
| Web & Digital Communications | Multimedia Specialist • Web Designer • Web Site Developer • Animator • Blog Developer • Streaming Media Specialist |

| HIGH SCHOOL COURSE REQUIREMENTS | | | | |
|--------------------------------------------------------------------------------------------|-------------------------------------------------|---------------------------------------------------------|----------------------------------------------------------------------|---------------------------------------------------------------------|
| English Four units required to graduate; including literature, composition, and speech. | Math Three units required to graduate | Science Three units required to graduate. | Social Studies Three units required to graduate. | Physical Education One unit required to graduate. |
| Choices may include: | Choices may include: | Required Units: | Required Units: | Required Units: |
| <input type="checkbox"/> English 9 05071 | <input type="checkbox"/> Algebra I 11031 | <input type="checkbox"/> Physical Science 13030 | <input type="checkbox"/> U.S. History 15085 | <input type="checkbox"/> Physical Education 1 unit 08030 |
| <input type="checkbox"/> English 10 05072 | <input type="checkbox"/> Geometry 11120 | <input type="checkbox"/> Biology 13020 | <input type="checkbox"/> American Government ½ unit AND 15111 | OR |
| <input type="checkbox"/> English 11 05073 | <input type="checkbox"/> Advanced Algebra 11032 | <input type="checkbox"/> One additional unit of Science | <input type="checkbox"/> Economics ½ unit 15060 | <input type="checkbox"/> Physical Education ½ unit AND 08030 |
| <input type="checkbox"/> English 12 05074 | | OR | OR | <input type="checkbox"/> Health ½ unit 18010 |
| | | <input type="checkbox"/> Biology 13020 | <input type="checkbox"/> Problems of Democracy 1 unit 15201 | |
| | | <input type="checkbox"/> Chemistry 13031 | | |
| | | <input type="checkbox"/> Physics 13042 | Additional units may include: | |
| | | | <input type="checkbox"/> Civics | |
| | | | <input type="checkbox"/> Geography | |
| | | | <input type="checkbox"/> Psychology | |
| | | | <input type="checkbox"/> World History | |

| Career and Technical Education Electives | | | | Extended Learning Opportunities | | | | | |
|----------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|--------------------------|---------------------------------|-------------------------------------------------|---------------|--------------------------|-----------------------------|--------------------------|--------------------------|
| Three units of foreign or Native American language, fine arts, or career and technical education are required to graduate. | | | | | | | | | |
| Information Technology Education | | <input type="checkbox"/> | Mobile Applications Development | 27128 | School-Based: | | Community Based: | | |
| <input type="checkbox"/> | Introduction to IT | 27101 | <input type="checkbox"/> | Programming Essentials | 27122 | <input type="checkbox"/> | SkillsUSA | <input type="checkbox"/> | Mentorship |
| <input type="checkbox"/> | IT Essentials 2 | 27220 | <input type="checkbox"/> | Fundamentals of JAVA Programming | 27125 | <input type="checkbox"/> | FBLA | <input type="checkbox"/> | Volunteer |
| <input type="checkbox"/> | Computer Hardware & Operating Systems (A+) | 27219 | <input type="checkbox"/> | Advanced JAVA Programming | 27127 | <input type="checkbox"/> | TSA | <input type="checkbox"/> | Part-time Employment |
| <input type="checkbox"/> | Introduction to Networking | 27265 | <input type="checkbox"/> | Data Modeling & SQL | 27500 | <input type="checkbox"/> | FFA | <input type="checkbox"/> | Service-Learning Project |
| <input type="checkbox"/> | CCNA Introduction to Networks | 27266 | <input type="checkbox"/> | Intro to Programming Languages | 27120 | <input type="checkbox"/> | DECA | <input type="checkbox"/> | Job Shadow |
| <input type="checkbox"/> | CCNA Routing & Switching Essentials | 27267 | <input type="checkbox"/> | Internet of Things Fundamentals | 27111 | <input type="checkbox"/> | FCCLA | <input type="checkbox"/> | Internship |
| <input type="checkbox"/> | CCNA Scaling Networks | 27268 | <input type="checkbox"/> | CTE AP Computer Science Principles | 27510 | <input type="checkbox"/> | Career Research | | |
| <input type="checkbox"/> | CCNA Connecting Networks | 27269 | <input type="checkbox"/> | CTE AP Computer Science A | 27520 | <input type="checkbox"/> | Cooperative Work Experience | | |
| <input type="checkbox"/> | Essentials of Desktop Operating Systems | 27300 | <input type="checkbox"/> | Governor’s School: Information Technology | 51012 | | | | |
| <input type="checkbox"/> | Essentials of Network Operating Systems | 27310 | <input type="checkbox"/> | Programming Essentials: Python | 27123 | | | | |
| <input type="checkbox"/> | Geographic Information Systems (GIS) | 27400 | <input type="checkbox"/> | Computer Gaming and Design | 27130 | | | | |
| <input type="checkbox"/> | Computer Software Applications | 27102 | <input type="checkbox"/> | Essentials of Desktop Operating Systems – Linux | 27305 | | | | |
| <input type="checkbox"/> | Introduction to Web Design | 27170 | | | | | | | |
| <input type="checkbox"/> | Introduction to Cybersecurity | 27280 | | | | | | | |

North Dakota Information Technology Related Postsecondary Programs

| Pathway | Certificate or Associate's Degree | Bachelor's Degree | Master's Degree or More |
|-----------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Information Support & Services | <input type="checkbox"/> Office Technology (CCCC) <input type="checkbox"/> Computer Science (NHSC) <input type="checkbox"/> Computer Support Specialist (TMCC) <input type="checkbox"/> Computer Information Technology (UTTC) <input type="checkbox"/> Computerized Office Management (DCB) <input type="checkbox"/> Data Analytics Technician (BSC) <input type="checkbox"/> Geographic Information Systems Technician (BSC) <input type="checkbox"/> Information Processing Specialist (BSC) <input type="checkbox"/> Information Systems Administrator (NDSCS) <input type="checkbox"/> Information Technology (DCB, LRSC, NDSCS, RU, SBC, WSC) <input type="checkbox"/> IT Forensics & Security (NDSCS) <input type="checkbox"/> Management Information Systems transfer (NDSCS) <input type="checkbox"/> Office Technology (CCCC) | <input type="checkbox"/> Applied Business Information Technology (MiSU) <input type="checkbox"/> Computer Technology Management (DSU) <input type="checkbox"/> Data Analytics (RU) <input type="checkbox"/> Data Science (RU, UND) <input type="checkbox"/> Information Analytics (DSU) <input type="checkbox"/> Information Technology Management (RU, UJ, UM) <input type="checkbox"/> Technology Education (DSU, VCSU) | <input type="checkbox"/> Data Science (RU, UND) <input type="checkbox"/> Information Systems (MiSU) <input type="checkbox"/> Library/Information Technology (VCSU) |
| Network Systems | <input type="checkbox"/> Cybersecurity (TMCC) <input type="checkbox"/> Cybersecurity & Computer Networks (BSC) <input type="checkbox"/> Information and Communications Technology (NDSCS) <input type="checkbox"/> Network Systems Administration (RU, TMCC) | <input type="checkbox"/> Computer Information Systems (UM, VCSU) <input type="checkbox"/> Computer Technology Management (DSU) <input type="checkbox"/> Cyber Security (RU, UND) <input type="checkbox"/> Cyber Security and Information Technology (BSC) <input type="checkbox"/> Information Systems (UND) <input type="checkbox"/> Information Technology Management (RU, UJ, UM) <input type="checkbox"/> Management Information Systems (MiSU, NDSU, UJ) | <input type="checkbox"/> Electrical and Computer Engineering (NDSU) <input type="checkbox"/> Cyber Security (UND) |
| Programming & Software Development | <input type="checkbox"/> Computer Programming (DSU) <input type="checkbox"/> Computer Science transfer (BSC, NDSCS, NHSC) <input type="checkbox"/> Software Application Development (RU) | <input type="checkbox"/> Computer Engineering (NDSU) <input type="checkbox"/> Computer Science (DSU, MiSU, NDSU, RU, UJ, UM, UND) <input type="checkbox"/> Software Engineering (VCSU) | <input type="checkbox"/> Computer Science (NDSU, UND) <input type="checkbox"/> Data Science (RU, UND) <input type="checkbox"/> Software Engineering (NDSU) |
| Web & Digital Communications | <input type="checkbox"/> Web Design (DCB, NDSCS, RU, TMCC) <input type="checkbox"/> Web Developer/Webmaster (DCB, DSU, NDSCS) <input type="checkbox"/> Web Page Development and Design (BSC) | | |

North Dakota Postsecondary Institutions Offering Information Technology Related Programs

| | | | | | |
|--------------|------------------------------------|--------------------------------------------------------------------|-------------|-----------------------------------|--------------------------------------------------------------------|
| BSC | Bismarck State College | www.bismarckstate.edu | NHSC | Nueta Hidatsa Sahnish College | http://nhsc.edu |
| CCCC | Cankdeska Cikana Community College | www.littlehoop.edu | RU | Rasmussen University | www.rasmussen.edu |
| DCB | Dakota College at Bottineau | www.dakotacollege.edu | SBC | Sitting Bull College | www.sittingbull.edu |
| DSU | Dickinson State University | www.dickinsonstate.edu | TMCC | Turtle Mountain Community College | www.tm.edu |
| LRSC | Lake Region State College | www.lrsc.edu | UJ | University of Jamestown | www.uj.edu |
| MaSU | Mayville State University | www.mayvillestate.edu | UM | University of Mary | www.umary.edu |
| MiSU | Minot State University | www.minotstateu.edu | UND | University of North Dakota | www.und.edu |
| NDSCS | ND State College of Science | www.ndscs.edu | VCSU | Valley City State University | www.vcsu.edu |
| NDSU | ND State University | www.ndsu.edu | WSC | Williston State College | www.willistonstate.edu |



Name _____

Law, Public Safety, Corrections & Security Career Cluster

| Pathway | OCCUPATIONS RELATING TO THIS CAREER CLUSTER |
|-------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Correction Services | Probation and Parole Officer • Warden • Corrections Officer • Jail Administrator • Detention Deputy • Case Manager • Transport Officer • Youth Services Worker |
| Emergency & Fire Management Services | Fire Fighter • EMT/Paramedic • Dispatcher • Hazardous Material Responder • Emergency Management Coordinator • Rescue Worker • Forest Fire Inspector and Investigator |
| Law Enforcement Services | Police Officer • Highway Patrol Officer • Immigration and Customs Inspector • Criminal Investigator • Bailiff • Game Enforcement Officer • Unemployment Fraud Investigator |
| Legal Services | Attorney • Judge • Paralegal • Legal Assistant • Magistrate • Mediator/Arbitrator • Court Reporter • Law Clerk • Information Officer • Case Management Specialist |
| Security & Protective Services | Computer Forensics Examiner • Industrial Espionage Investigator • Armored Car Guard • Lifeguard • Information System and Security Specialist • Loss Prevention Specialist |

| HIGH SCHOOL COURSE REQUIREMENTS | | | | |
|--------------------------------------------------------------------------------------------|-------------------------------------------------|---------------------------------------------------------|----------------------------------------------------------------------|---------------------------------------------------------------------|
| English Four units required to graduate; including literature, composition, and speech. | Math Three units required to graduate | Science Three units required to graduate. | Social Studies Three units required to graduate. | Physical Education One unit required to graduate. |
| Choices may include: | Choices may include: | Required Units: | Required Units: | Required Units: |
| <input type="checkbox"/> English 9 05071 | <input type="checkbox"/> Algebra I 11031 | <input type="checkbox"/> Physical Science 13030 | <input type="checkbox"/> U.S. History 15085 | <input type="checkbox"/> Physical Education 1 unit 08030 |
| <input type="checkbox"/> English 10 05072 | <input type="checkbox"/> Geometry 11120 | <input type="checkbox"/> Biology 13020 | <input type="checkbox"/> American Government ½ unit AND 15111 | OR |
| <input type="checkbox"/> English 11 05073 | <input type="checkbox"/> Advanced Algebra 11032 | <input type="checkbox"/> One additional unit of Science | <input type="checkbox"/> Economics ½ unit 15060 | <input type="checkbox"/> Physical Education ½ unit AND 08030 |
| <input type="checkbox"/> English 12 05074 | | OR | OR | <input type="checkbox"/> Health ½ unit 18010 |
| | | <input type="checkbox"/> Biology 13020 | <input type="checkbox"/> Problems of Democracy 1 unit 15201 | |
| | | <input type="checkbox"/> Chemistry 13031 | | |
| | | <input type="checkbox"/> Physics 13042 | Additional units may include: | |
| | | | <input type="checkbox"/> Civics | |
| | | | <input type="checkbox"/> Geography | |
| | | | <input type="checkbox"/> Psychology | |
| | | | <input type="checkbox"/> World History | |

| Career & Technical Education Electives Three units of foreign or Native American language, fine arts, or career and technical education are required to graduate. | | Extended Learning Opportunities | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------|------------------------------------------------|---------------------------------------------------|
| Business Education | Information Technology Education | School-Based: | Community Based: |
| <input type="checkbox"/> Communication Technology 14028 | <input type="checkbox"/> Computer Hardware & Operating Systems (A+) 27219 | <input type="checkbox"/> FBLA | <input type="checkbox"/> Mentorship |
| <input type="checkbox"/> Business Law 14090 | <input type="checkbox"/> Computer Software Applications 27102 | <input type="checkbox"/> FFA | <input type="checkbox"/> Volunteer |
| <input type="checkbox"/> Business Computer Applications 14024 | <input type="checkbox"/> Geographic Info Systems (GIS) 27400 | <input type="checkbox"/> FCCLA | <input type="checkbox"/> Part-time Employment |
| <input type="checkbox"/> Forensic Accounting 14014 | <input type="checkbox"/> Introduction to Cybersecurity 27280 | <input type="checkbox"/> SkillsUSA | <input type="checkbox"/> Service-Learning Project |
| | <input type="checkbox"/> Internet of Things Fundamentals 27111 | <input type="checkbox"/> TSA | <input type="checkbox"/> Job Shadow |
| | | <input type="checkbox"/> DECA | <input type="checkbox"/> Internship |
| Health Science Education | Technology & Engineering Education | <input type="checkbox"/> Career Research | |
| <input type="checkbox"/> Emergency Medical Services 07045 | <input type="checkbox"/> Technology & Society 10096 | <input type="checkbox"/> Cooperative Education | |
| <input type="checkbox"/> Advanced EMS 07046 | <input type="checkbox"/> Technological Systems 10515 | | |
| | | | |
| | | | |
| | | | |

North Dakota Law, Public Safety, Corrections & Security Related Postsecondary Programs

| Pathway | Certificate or Associate's Degree | Bachelor's Degree | Master's Degree or More |
|-------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|
| Correction Services | <input type="checkbox"/> Criminal Justice Transfer (BSC, NDSCS, SBC, UTTC) <input type="checkbox"/> Criminal Justice (BSC, DSU, RU) | <input type="checkbox"/> Criminal Justice (DSU, MiSU, NDSU, RU, UTTC, UJ, UM, UND) | <input type="checkbox"/> Criminal Justice (NDSU, UND) |
| Emergency & Fire Management Services | <input type="checkbox"/> Emergency Medical Services-EMS (NDSCS) <input type="checkbox"/> Emergency Medical Technician-EMT (NDSCS) <input type="checkbox"/> Paramedic Technology (BSC, DCB, NDSCS) | <input type="checkbox"/> Emergency Management (NDSU) | <input type="checkbox"/> Emergency Management (NDSU) |
| Law Enforcement Services | <input type="checkbox"/> Criminal Justice Transfer (BSC, NDSCS, SBC, UTTC) <input type="checkbox"/> Criminal Justice (BSC, RU) <input type="checkbox"/> Law Enforcement (LRSC, RU) <input type="checkbox"/> Peace Officer (LRSC) | <input type="checkbox"/> Criminal Justice (DSU, MiSU, NDSU, RU, UTTC, UJ, UM, UND) <input type="checkbox"/> Cybersecurity (UND) <input type="checkbox"/> Forensic Science (UND) | <input type="checkbox"/> Criminal Justice (NDSU, UND) <input type="checkbox"/> Cybersecurity (UND) |
| Legal Services | <input type="checkbox"/> Law Transfer (NDSCS) <input type="checkbox"/> Administrative Assistant/Legal (BSC) <input type="checkbox"/> Paralegal/Lay Advocate (NDSCS, RU, SBC) <input type="checkbox"/> Political Science transfer (BSC) | <input type="checkbox"/> Political Science (DSU, NDSU, UJ, UND) <input type="checkbox"/> Law (UND) | <input type="checkbox"/> Law (UND) |
| Security & Protective Services | <input type="checkbox"/> Military Science (BSC) | <input type="checkbox"/> Military Science-ROTC (NDSU, UND) | |

North Dakota Postsecondary Institutions Offering Law, Public Safety, Corrections & Security Related Programs

| | | | | | |
|--------------|-----------------------------|--------------------------------------------------------------------|-------------|-----------------------------------|--------------------------------------------------------------------|
| BSC | Bismarck State College | www.bismarckstate.edu | SBC | Sitting Bull College | www.sittingbull.edu |
| DCB | Dakota College at Bottineau | www.dakotacollege.edu | TMCC | Turtle Mountain Community College | www.tm.edu |
| DSU | Dickinson State University | www.dickinsonstate.edu | UTTC | United Tribes Technical College | www.uttcc.edu |
| LRSC | Lake Region State College | www.lrsc.edu | UM | University of Mary | www.umary.edu |
| MiSU | Minot State University | www.minotstateu.edu | UND | University of North Dakota | www.und.edu |
| NDSCS | ND State College of Science | www.ndscs.edu | VCSU | Valley City State University | www.vcsu.edu |
| NDSU | ND State University | www.ndsu.edu | WSC | Williston State College | www.willistonstate.edu |
| RU | Rasmussen University | www.rasmussen.edu | | | |



Name _____

Manufacturing Career Cluster

| Pathway | OCCUPATIONS RELATING TO THIS CAREER CLUSTER |
|-----------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Health, Safety & Environmental Assurance | Environmental Engineer • Health and Safety Specialist • Safety Team Leader • Environmental Specialist • Safety Coordinator • Environmental Field Technician |
| Logistics & Inventory Control | Dispatcher • Freight/Stock/Material Mover • Industrial Truck & Tractor Operator • Materials Handler • Logistical Engineer • Quality Control Technician |
| Maintenance, Installation & Repair | Computer Repair Technician • Boilermaker • Communication Systems Installer • Laser Systems Technician • Industrial Machinery Mechanic • Instrument Calibration Technician |
| Manufacturing Production Process Development | Industrial Engineer • Manufacturing Technician • Purchasing Agent • Precision Inspector, Tester and Grader • Production Manager • Electronics Engineer |
| Production | Welder • Calibration Technician • Precision Layout Worker • Assembler • Tool & Die Maker • Sheet Metal Worker • Micro and Nano Fabrication Technicians |
| Quality Assurance | Process Control Technician • Inspector • Quality Control Technician • Calibration Technician • Lab Technician • Statistical Process Control (SPC) Coordinator |

| HIGH SCHOOL COURSE REQUIREMENTS | | | | | | | | | |
|---------------------------------------------------------------------------------|-------|-------------------------------------------|-------|---------------------------------------------------------|-------|----------------------------------------------------------------|-------|---------------------------------------------------------------|-------|
| English | | Math | | Science | | Social Studies | | Physical Education | |
| Four units required to graduate; including literature, composition, and speech. | | Three units required to graduate | | Three units required to graduate. | | Three units required to graduate. | | One unit required to graduate. | |
| Choices may include: | | Choices may include: | | Required Units: | | Required Units: | | Required Units: | |
| <input type="checkbox"/> English 9 | 05071 | <input type="checkbox"/> Algebra I | 11031 | <input type="checkbox"/> Physical Science | 13030 | <input type="checkbox"/> U.S. History | 15085 | <input type="checkbox"/> Physical Education 1 unit | 08030 |
| <input type="checkbox"/> English 10 | 05072 | <input type="checkbox"/> Geometry | 11120 | <input type="checkbox"/> Biology | 13020 | <input type="checkbox"/> American Government ½ unit AND | 15111 | OR | |
| <input type="checkbox"/> English 11 | 05073 | <input type="checkbox"/> Advanced Algebra | 11032 | <input type="checkbox"/> One additional unit of Science | | <input type="checkbox"/> Economics ½ unit | 15060 | <input type="checkbox"/> Physical Education ½ unit AND | 08030 |
| <input type="checkbox"/> English 12 | 05074 | | | OR | | OR | | <input type="checkbox"/> Health ½ unit | 18010 |
| | | | | <input type="checkbox"/> Biology | 13020 | <input type="checkbox"/> Problems of Democracy 1 unit | 15201 | | |
| | | | | <input type="checkbox"/> Chemistry | 13031 | | | | |
| | | | | <input type="checkbox"/> Physics | 13042 | Additional units may include: | | | |
| | | | | | | <input type="checkbox"/> Civics | | | |
| | | | | | | <input type="checkbox"/> Geography | | | |
| | | | | | | <input type="checkbox"/> Psychology | | | |
| | | | | | | <input type="checkbox"/> World History | | | |

| Career & Technical Education Electives | | | | | Extended Learning Opportunities | | | | |
|----------------------------------------------------------------------------------------------------------------------------|-------|-----------------------------------------------------------|-------|--|------------------------------------------------------|--|---------------------------------------------------|--|--|
| Three units of foreign or Native American language, fine arts, or career and technical education are required to graduate. | | | | | | | | | |
| Agriculture Education | | Business Education | | | School-Based: | | Community Based: | | |
| <input type="checkbox"/> Ag Mechanics Technology I | 01043 | <input type="checkbox"/> Business Technology & Procedures | 14079 | | <input type="checkbox"/> SkillsUSA | | <input type="checkbox"/> Mentorship | | |
| <input type="checkbox"/> Ag Mechanics Technology II | 01044 | <input type="checkbox"/> Database | 14026 | | <input type="checkbox"/> TSA | | <input type="checkbox"/> Volunteer | | |
| <input type="checkbox"/> Ag Mechanics Power Systems | 01045 | <input type="checkbox"/> Spreadsheets | 14025 | | <input type="checkbox"/> FFA | | <input type="checkbox"/> Part-time Employment | | |
| <input type="checkbox"/> Agricultural Welding & Fabrication | 01046 | <input type="checkbox"/> Business Fundamentals | 14230 | | <input type="checkbox"/> FCCLA | | <input type="checkbox"/> Service-Learning Project | | |
| <input type="checkbox"/> Advanced Ag Welding & Fabrication | 01047 | | | | <input type="checkbox"/> DECA | | <input type="checkbox"/> Job Shadow | | |
| | | Trade, Industry & Technical Education | | | <input type="checkbox"/> FBLA | | <input type="checkbox"/> Internship | | |
| Technology & Engineering Education | | <input type="checkbox"/> Automated Manufacturing | 17113 | | <input type="checkbox"/> Career Research | | | | |
| <input type="checkbox"/> Engineering Design | 10415 | <input type="checkbox"/> Drafting Technology I | 17130 | | <input type="checkbox"/> Cooperative Work Experience | | | | |
| <input type="checkbox"/> PLTW Introduction to Engineering Design | 10511 | <input type="checkbox"/> Drafting Technology II | 17131 | | | | | | |
| <input type="checkbox"/> PLTW Principles of Engineering | 10513 | <input type="checkbox"/> Machine Tooling Technology | 17230 | | | | | | |
| <input type="checkbox"/> PLTW Computer Integrated Manufacturing | 10517 | <input type="checkbox"/> Sheet Metal Technology | 17115 | | | | | | |
| <input type="checkbox"/> Manufacturing Technology | 10121 | <input type="checkbox"/> Welding Technology I | 17236 | | | | | | |
| <input type="checkbox"/> Production Technology | 10110 | <input type="checkbox"/> Welding Technology II | 17237 | | | | | | |
| <input type="checkbox"/> Robotics Engineering | 10411 | <input type="checkbox"/> Electronics Technology I | 17150 | | | | | | |
| | | <input type="checkbox"/> Electronics Technology II | 17151 | | | | | | |
| | | <input type="checkbox"/> Electronics Technology III | 17152 | | | | | | |

North Dakota Manufacturing Related Postsecondary Programs

| Pathway | Certificate or Associate's Degree | Bachelor's Degree | Master's Degree or More |
|-----------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Health, Safety & Environmental Assurance | <input type="checkbox"/> Environmental Technology/Science transfer (NHSC, SBC, UTTC) | <input type="checkbox"/> Emergency Management (NDSU) <input type="checkbox"/> Environmental Design (NDSU) <input type="checkbox"/> Environmental Health (DSU) <input type="checkbox"/> Environmental Science (DSU, NHSC, SBC, UTTC, UND, VCSU) | <input type="checkbox"/> Emergency Management (NDSU) <input type="checkbox"/> Environmental and Conservation Sciences (NDSU, SBC) <input type="checkbox"/> Environmental Engineering (UND) |
| Logistics & Inventory Control | <input type="checkbox"/> Information Technology (DCB) <input type="checkbox"/> Information Processing Specialist (BSC) <input type="checkbox"/> Management Information Systems (NDSCS) | <input type="checkbox"/> Business Process Integration Management (VCSU) <input type="checkbox"/> Computer Technology Management (DSU) <input type="checkbox"/> Management Information Systems (MISU, NDSU) <input type="checkbox"/> Operations and Supply Chain Management (UND) | <input type="checkbox"/> Supply Chain Management (NDSU) <input type="checkbox"/> Transportation and Urban Systems (NDSU) |
| Maintenance, Installation & Repair | <input type="checkbox"/> Electrical Lineworker (BSC) <input type="checkbox"/> Electrical Power Technology (BSC) <input type="checkbox"/> Electrical Transmission Systems Technology (BSC) <input type="checkbox"/> Electronics Technology (BSC) <input type="checkbox"/> Electronics/Telecommunications Technology (BSC) <input type="checkbox"/> Mechanical Maintenance Technology (BSC) <input type="checkbox"/> Mechanical Systems (NDSCS) <input type="checkbox"/> Simulation Technology (LRSC) <input type="checkbox"/> Welding Technology (BSC, BJCC, LRSC, LW, NDSCS, NHSC, SBC, TMCC, UTTC, WSC) <input type="checkbox"/> Wind Energy Technician (LRSC) | | |
| Manufacturing Process Production Development | <input type="checkbox"/> Instrumentation & Control Technology (BSC) <input type="checkbox"/> Power Plant Technology (BSC, TMCC) <input type="checkbox"/> Process Plant Technology (BSC, TMCC) <input type="checkbox"/> Energy Services & Renewable Technician (BSC) | <input type="checkbox"/> Industrial Engineering and Management (NDSU) <input type="checkbox"/> Manufacturing Engineering (NDSU) | <input type="checkbox"/> Industrial Engineering and Management (NDSU) <input type="checkbox"/> Manufacturing Engineering (NDSU) |
| Production | <input type="checkbox"/> Heating, Ventilation, and Air Conditioning (BSC, NDSCS, TMCC) <input type="checkbox"/> Precision Machining Technology (NDSCS) <input type="checkbox"/> Robotics, Automation and Mechatronics Technology (NDSCS) <input type="checkbox"/> Welding Technology (BSC, BJCC, LRSC, LW, NDSCS, NHSC, SBC, TMCC, UTTC, WSC) | <input type="checkbox"/> Energy Management (BSC) | <input type="checkbox"/> Materials and Nanotechnology (NDSU) |
| Quality Assurance | <input type="checkbox"/> Instrumentation and Control Technology (BSC) | <input type="checkbox"/> Industrial Engineering and Management (NDSU) | <input type="checkbox"/> Industrial Engineering and Management (NDSU) |

North Dakota Postsecondary Institutions Offering Manufacturing Related Programs

| | | | | | |
|--------------|------------------------------------|---------------------------------------------------------------------------------------|-------------|-----------------------------------|--------------------------------------------------------------------|
| BSC | Bismarck State College | www.bismarckstate.edu | NDSU | ND State University | www.ndsu.edu |
| BJCC | Burdick Job Corps Center | http://quentinnburdick.jobcorps.gov | NHSC | Nueta Hidatsa Sahnish College | http://nhsc.edu |
| CCCC | Cankdeska Cikana Community College | www.littlehoop.edu | SBC | Sitting Bull College | www.sittingbull.edu |
| DCB | Dakota College at Bottineau | www.dakotacollege.edu | TMCC | Turtle Mountain Community College | www.tm.edu |
| DSU | Dickinson State University | www.dickinsonstate.edu | UTTC | United Tribes Technical College | www.uttcc.edu |
| LRSC | Lake Region State College | www.lrsc.edu | UM | University of Mary | www.umary.edu |
| LW | Lynnes Welding – Bismarck & Fargo | http://learntoweld.com | UND | University of North Dakota | www.und.edu |
| MISU | Minot State University | www.minotstateu.edu | VCSU | Valley City State University | www.vcsu.edu |
| NDSCS | ND State College of Science | www.ndscs.edu | WSC | Williston State College | www.willistonstate.edu |



Name _____

Marketing Career Cluster

| Pathway | OCCUPATIONS RELATING TO THIS CAREER CLUSTER |
|---------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Marketing Communications | Account Executive • Advertising Manager • Creative Director • Media Buyer • Marketing Associate • Public Information Director • Interactive Media Specialist |
| Marketing Management | Database Manager • Customer Service Representative • Brand Manager • Director of Market Development • Marketing Services Manager • Planning Analyst |
| Marketing Research | Research Associate • Research Specialist • Market Research Manager • Strategic Planner • Research Analyst • Forecasting Manager • Marketing Strategist |
| Merchandising | Merchandise Buyer • Operations Manager • Retail Marketing Coordinator • Receiving Clerk • Visual Merchandise Manager • Department Manager • Sales Associate |
| Professional Selling | Account Executive • Broker • Manufacturer's Representative • Field Representative • Sales Executive • Solutions Advisory • Client Relationship Manager |

| HIGH SCHOOL COURSE REQUIREMENTS | | | | |
|--------------------------------------------------------------------------------------------|-------------------------------------------------|---------------------------------------------------------|----------------------------------------------------------------------|---------------------------------------------------------------------|
| English Four units required to graduate; including literature, composition, and speech. | Math Three units required to graduate | Science Three units required to graduate. | Social Studies Three units required to graduate. | Physical Education One unit required to graduate. |
| Choices may include: | Choices may include: | Required Units: | Required Units: | Required Units: |
| <input type="checkbox"/> English 9 05071 | <input type="checkbox"/> Algebra I 11031 | <input type="checkbox"/> Physical Science 13030 | <input type="checkbox"/> U.S. History 15085 | <input type="checkbox"/> Physical Education 1 unit 08030 |
| <input type="checkbox"/> English 10 05072 | <input type="checkbox"/> Geometry 11120 | <input type="checkbox"/> Biology 13020 | <input type="checkbox"/> American Government ½ unit AND 15111 | OR |
| <input type="checkbox"/> English 11 05073 | <input type="checkbox"/> Advanced Algebra 11032 | <input type="checkbox"/> One additional unit of Science | <input type="checkbox"/> Economics ½ unit 15060 | <input type="checkbox"/> Physical Education ½ unit AND 08030 |
| <input type="checkbox"/> English 12 05074 | | OR | OR | <input type="checkbox"/> Health ½ unit 18010 |
| | | <input type="checkbox"/> Biology 13020 | <input type="checkbox"/> Problems of Democracy 1 unit 15201 | |
| | | <input type="checkbox"/> Chemistry 13031 | | |
| | | <input type="checkbox"/> Physics 13042 | Additional units may include: | |
| | | | <input type="checkbox"/> Civics | |
| | | | <input type="checkbox"/> Geography | |
| | | | <input type="checkbox"/> Psychology | |
| | | | <input type="checkbox"/> World History | |

| Career & Technical Education Electives Three units of foreign or Native American language, fine arts, or career and technical education are required to graduate. | | | Extended Learning Opportunities | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|---------------------------------------------------------------|------------------------------------------------------|---------------------------------------------------|
| Marketing Education | | Business Education | School-Based: | Community Based: |
| <input type="checkbox"/> Principles of Marketing 04080 | | <input type="checkbox"/> Communication Technologies 14028 | <input type="checkbox"/> DECA | <input type="checkbox"/> Mentorship |
| <input type="checkbox"/> Marketing I 04210 | | <input type="checkbox"/> Management I 14231 | <input type="checkbox"/> FBLA | <input type="checkbox"/> Volunteer |
| <input type="checkbox"/> Marketing II 04215 | | <input type="checkbox"/> Management II 14232 | <input type="checkbox"/> FCCLA | <input type="checkbox"/> Part-time Employment |
| <input type="checkbox"/> Management 04223 | | <input type="checkbox"/> Entrepreneurship 14111 | <input type="checkbox"/> SkillsUSA | <input type="checkbox"/> Service-Learning Project |
| <input type="checkbox"/> Principles of Sports and Entertainment Marketing 04239 | | <input type="checkbox"/> Operations Management 14234 | <input type="checkbox"/> TSA | <input type="checkbox"/> Job Shadow |
| <input type="checkbox"/> Sports and Entertainment Marketing 04240 | | | <input type="checkbox"/> FFA | <input type="checkbox"/> Internship |
| <input type="checkbox"/> International Marketing 04310 | | | <input type="checkbox"/> Career Research | |
| <input type="checkbox"/> School-Based Enterprise 04290 | | Trade, Industry & Technical Education | <input type="checkbox"/> Cooperative Work Experience | |
| <input type="checkbox"/> Principles of Finance 04081 | | <input type="checkbox"/> Parts & Merchandise Management 17035 | | |
| <input type="checkbox"/> Business Finance 04082 | | | | |
| <input type="checkbox"/> Principles of Entrepreneurship 04110 | | | | |
| <input type="checkbox"/> Entrepreneurship 04111 | | | | |
| <input type="checkbox"/> Social Media Marketing 04235 | | | | |

North Dakota Marketing Related Postsecondary Programs

| Pathway | Certificate or Associate's Degree | Bachelor's Degree | Master's Degree or More |
|---------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| Marketing Communications | <input type="checkbox"/> Advertising and Marketing (DCB) <input type="checkbox"/> Information & Communications Technology (NDSCS) <input type="checkbox"/> Mass Communication (BSC) | <input type="checkbox"/> Communication (UM, UND) <input type="checkbox"/> Management Communication (NDSU) | <input type="checkbox"/> Communication (UND) |
| Marketing Management | <input type="checkbox"/> Advertising & Marketing (DCB) <input type="checkbox"/> Business Management (MaSU, NDSCS, RU, WSC) <input type="checkbox"/> Management (BSC) <input type="checkbox"/> Management Entrepreneurship (BSC) <input type="checkbox"/> Marketing (DSU, LRSC, RU) <input type="checkbox"/> Marketing/Supervision (LRSC, NDSCS) <input type="checkbox"/> Marketing and Management transfer (DCB) | <input type="checkbox"/> Business Management (RU) <input type="checkbox"/> Hospitality & Tourism Management (NDSU) <input type="checkbox"/> International Entrepreneurship (TBC) <input type="checkbox"/> Management (MiSU, NDSU) <input type="checkbox"/> Marketing (MiSU, NDSU, RU, UM, UND) <input type="checkbox"/> Sport Management (MaSU, NDSU, UM) <input type="checkbox"/> Supply Chain and Logistics Management (RU) | <input type="checkbox"/> Management (MiSU) <input type="checkbox"/> Sport Management (MiSU) <input type="checkbox"/> Supply Chain Management (NDSU) |
| Marketing Research | | <input type="checkbox"/> International Entrepreneurship (TBC) | |
| Merchandising | | <input type="checkbox"/> Apparel, Retail Merchandising, & Design (NDSU) <input type="checkbox"/> Operations and Supply Chain Management (UND) | <input type="checkbox"/> Merchandising (NDSU) |
| Professional Selling | <input type="checkbox"/> Entrepreneurship (NHSC, NDSCS, TMCC) <input type="checkbox"/> Marketing, Sales and Hospitality Services (NDSCS) <input type="checkbox"/> Sales (NDSCS, VCSU) | <input type="checkbox"/> Entrepreneurship (MiSU, UND) | |

North Dakota Postsecondary Institutions Offering Marketing Related Programs

| | | | | | |
|--------------|------------------------------------|--------------------------------------------------------------------|-------------|---------------------------------|--------------------------------------------------------------------|
| BSC | Bismarck State College | www.bismarckstate.edu | NHSC | Nueta Hidatsa Sahnish College | http://nhsc.edu |
| CCCC | Cankdeska Cikana Community College | www.littlehoop.edu | RU | Rasmussen University | www.rasmussen.edu |
| DCB | Dakota College at Bottineau | www.dakotacollege.edu | UTTC | United Tribes Technical College | www.uttcc.edu |
| DSU | Dickinson State University | www.dickinsonstate.edu | UM | University of Mary | www.umary.edu |
| LRSC | Lake Region State College | www.lrsc.edu | UND | University of North Dakota | www.und.edu |
| MiSU | Minot State University | www.minotstateu.edu | VCSU | Valley City State University | www.vcsu.edu |
| NDSCS | ND State College of Science | www.ndscs.edu | WSC | Williston State College | www.willistonstate.edu |
| NDSU | ND State University | www.ndsu.edu | | | |



Name _____

Science, Technology, Engineering & Mathematics (STEM) Career Cluster

| Pathway | OCCUPATIONS RELATING TO THIS CAREER CLUSTER |
|-------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Engineering & Technology | Aerospace Engineer • Architectural Engineer • Automotive Engineer • CAD Technician • Civil Engineer • Computer Programmer • Electrical Engineer • Mapping Technician • Mining Engineer Metallurgist • Petroleum Engineer • Survey Technician • Biomedical Engineer • Agricultural Technician • Application Engineer |
| Science & Mathematics | Anthropologist • Astronomer • Chemist • Geneticist • Ecologist • Environmental Scientist • Geologist • Research Technician • Economist • Analytical Chemist • Meteorologist Nuclear Chemist/Technician • Statistician • Atmospheric Scientist • Zoologist • Astrophysicist • Quality-Control Scientist |

| HIGH SCHOOL COURSE REQUIREMENTS | | | | |
|---------------------------------------------------------------------------------|-------------------------------------------------|---------------------------------------------------------|----------------------------------------------------------------------|---------------------------------------------------------------------|
| English | Math | Science | Social Studies | Physical Education |
| Four units required to graduate; including literature, composition, and speech. | Three units required to graduate | Three units required to graduate. | Three units required to graduate. | One unit required to graduate. |
| Choices may include: | Choices may include: | Required Units: | Required Units: | Required Units: |
| <input type="checkbox"/> English 9 05071 | <input type="checkbox"/> Algebra I 11031 | <input type="checkbox"/> Physical Science 13030 | <input type="checkbox"/> U.S. History 15085 | <input type="checkbox"/> Physical Education 1 unit 08030 |
| <input type="checkbox"/> English 10 05072 | <input type="checkbox"/> Geometry 11120 | <input type="checkbox"/> Biology 13020 | <input type="checkbox"/> American Government ½ unit AND 15111 | OR |
| <input type="checkbox"/> English 11 05073 | <input type="checkbox"/> Advanced Algebra 11032 | <input type="checkbox"/> One additional unit of Science | <input type="checkbox"/> Economics ½ unit 15060 | <input type="checkbox"/> Physical Education ½ unit AND 08030 |
| <input type="checkbox"/> English 12 05074 | | OR | OR | <input type="checkbox"/> Health ½ unit 18010 |
| | | <input type="checkbox"/> Biology 13020 | <input type="checkbox"/> Problems of Democracy 1 unit 15201 | |
| | | <input type="checkbox"/> Chemistry 13031 | | |
| | | <input type="checkbox"/> Physics 13042 | Additional units may include: | |
| | | | <input type="checkbox"/> Civics | |
| | | | <input type="checkbox"/> Geography | |
| | | | <input type="checkbox"/> Psychology | |
| | | | <input type="checkbox"/> World History | |

| Career & Technical Education Electives | | | Extended Learning Opportunities | |
|----------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------|--|------------------------------------------------------|---------------------------------------------------|
| Three units of foreign or Native American language, fine arts, or career and technical education are required to graduate. | | | | |
| Technology & Engineering Education | | | School-Based: | Community Based: |
| <input type="checkbox"/> Foundations of Technology 10094 | <input type="checkbox"/> Biomedical Technology 10710 | | <input type="checkbox"/> TSA | <input type="checkbox"/> Mentorship |
| <input type="checkbox"/> Technology & Society 10096 | <input type="checkbox"/> Applying Technology 10093 | | <input type="checkbox"/> SkillsUSA | <input type="checkbox"/> Volunteer |
| <input type="checkbox"/> Advanced Design Applications 10338 | <input type="checkbox"/> Production Technology 10110 | | <input type="checkbox"/> FFA | <input type="checkbox"/> Part-time Employment |
| <input type="checkbox"/> Advanced Tech Applications 10339 | <input type="checkbox"/> Construction Technology 10111 | | <input type="checkbox"/> FBLA | <input type="checkbox"/> Service-Learning Project |
| <input type="checkbox"/> Technological Design 10410 | <input type="checkbox"/> Manufacturing Technology 10121 | | <input type="checkbox"/> FCCLA | <input type="checkbox"/> Job Shadow |
| <input type="checkbox"/> Engineering Design 10415 | <input type="checkbox"/> Communication Technology 10251 | | <input type="checkbox"/> DECA | <input type="checkbox"/> Internship |
| <input type="checkbox"/> Invention and Innovation 10510 | <input type="checkbox"/> Design/Drafting 10259 | | <input type="checkbox"/> Career Research | |
| <input type="checkbox"/> PLTW Introduction to Engineering Design 10511 | <input type="checkbox"/> 3D Modeling & Design 10260 | | <input type="checkbox"/> Cooperative Work Experience | |
| <input type="checkbox"/> PLTW Digital Electronics 10512 | <input type="checkbox"/> Energy & Transportation Technology 10331 | | | |
| <input type="checkbox"/> PLTW Principles of Engineering 10513 | <input type="checkbox"/> Robotics Engineering 10411 | | | |
| <input type="checkbox"/> PLTW Civil Engineering and Architecture 10514 | <input type="checkbox"/> STEM Seminar 10610 | | | |
| <input type="checkbox"/> PLTW Computer Integrated Manufacturing 10517 | <input type="checkbox"/> Trade, Industry & Technical Education | | | |
| <input type="checkbox"/> PLTW Principles of Biomedical Science 10730 | <input type="checkbox"/> Drafting Technology I 17130 | | | |
| <input type="checkbox"/> PLTW Principles of Medical Interventions 10734 | <input type="checkbox"/> Drafting Technology II 17131 | | | |
| <input type="checkbox"/> PLTW Principles of Human Body Systems 10732 | <input type="checkbox"/> Agriculture Education | | | |
| <input type="checkbox"/> Technological Systems 10515 | <input type="checkbox"/> World Agricultural Science and Technology 01069 | | | |

North Dakota STEM Related Postsecondary Programs

| Pathway | Certificate or Associate's Degree | Bachelor's Degree | Master's Degree or More |
|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Engineering & Technology | <input type="checkbox"/> Architectural Drafting & Estimating Technology (NDSCS) <input type="checkbox"/> Engineering Technology (BSC, DSU) <input type="checkbox"/> Land Surveying and Civil Engineering (NDSCS) <input type="checkbox"/> Nuclear Power Technology (BSC) <input type="checkbox"/> Petroleum Production Technology (BSC) <input type="checkbox"/> Engineering transfer (BSC, CCCC, NDSCS, NHSC, SBC, UTTC) <input type="checkbox"/> Robotics, Automation & Mechatronics Technology (NDSCS) <input type="checkbox"/> Simulation Technology (LRSC) <input type="checkbox"/> Technical Studies (BSC, NDSCS) | <input type="checkbox"/> Agricultural and Biosystems Engineering (NDSU) <input type="checkbox"/> Chemical Engineering (UND) <input type="checkbox"/> Civil Engineering (NDSU, UM, UND) <input type="checkbox"/> Computer Engineering (NDSU) <input type="checkbox"/> Construction Engineering (NDSU) <input type="checkbox"/> Electrical Engineering (NDSU, UM, UND) <input type="checkbox"/> Geological Engineering (UND) <input type="checkbox"/> Industrial Engineering and Management (NDSU) <input type="checkbox"/> Manufacturing Engineering (NDSU) <input type="checkbox"/> Mechanical Engineering (NDSU, UJ, UM, UND) <input type="checkbox"/> Petroleum Engineering (UND) <input type="checkbox"/> Software Engineering (VCSU) <input type="checkbox"/> Technology Education (DSU, VCSU) | <input type="checkbox"/> Agricultural and Biosystems Engineering (NDSU) <input type="checkbox"/> Biomedical Engineering (UND) <input type="checkbox"/> Chemical Engineering (UND) <input type="checkbox"/> Civil Engineering (NDSU, UND) <input type="checkbox"/> Electrical Engineering (UND) <input type="checkbox"/> Electrical/Computer Engineering (NDSU) <input type="checkbox"/> Energy Systems Engineering (UND) <input type="checkbox"/> Environmental Engineering (NDSU, UND) <input type="checkbox"/> Geological Engineering (UND) <input type="checkbox"/> Industrial Engineering & Management (NDSU) <input type="checkbox"/> Manufacturing Engineering (NDSU) <input type="checkbox"/> Mechanical Engineering (NDSU, UND) <input type="checkbox"/> Petroleum Engineering (UND) <input type="checkbox"/> Software Engineering (NDSU) |
| | <input type="checkbox"/> Biology transfer (BSC, DCB, DSU) <input type="checkbox"/> Biotechnology transfer (NDSCS) <input type="checkbox"/> Chemistry transfer (BSC, DCB, DSU, NDSCS) <input type="checkbox"/> Environmental Science Transfer (NHSC, SBC, UTTC) <input type="checkbox"/> Environmental Tech - Lab & Field Technician (DCB) <input type="checkbox"/> Environmental Tech – Natural Resource Mgmt. (DCB) <input type="checkbox"/> Geology (DSU) <input type="checkbox"/> Mathematics transfer (BSC, DCB, NDSCS, NHSC) <input type="checkbox"/> Natural Resource Management (TMCC) <input type="checkbox"/> Natural Science transfer (NDSCS) <input type="checkbox"/> Pharmacy transfer (DCB) <input type="checkbox"/> Physical Science transfer (DSU, NDSCS) <input type="checkbox"/> Physics transfer (BSC) <input type="checkbox"/> Science transfer (NHSC) | <input type="checkbox"/> Atmospheric Sciences (UND) <input type="checkbox"/> Biochemistry and Molecular Biology (NDSU, UJ) <input type="checkbox"/> Biology/Biological Science (DSU, MaSU, MiSU, NDSU, UJ, UM, UND, VCSU) <input type="checkbox"/> Biotechnology (NDSU) <input type="checkbox"/> Chemistry (DSU, MaSU, MiSU, NDSU, UM, UND, VCSU) <input type="checkbox"/> Computer Science (DSU, MiSU, NDSU, RC, UM, UND) <input type="checkbox"/> Data Science (UND) <input type="checkbox"/> Earth Science (UND) <input type="checkbox"/> Environmental Science (DSU, NHSC, SBC, UTTC, UND, VCSU) <input type="checkbox"/> Forensic Science (UND) <input type="checkbox"/> Geology (MiSU, NDSU, UND) <input type="checkbox"/> Horticulture (NDSU) <input type="checkbox"/> Mathematics (DSU, MaSU, MiSU, NDSU, UJ, UM, UND) <input type="checkbox"/> Medicinal Plant Chemistry (MiSU) <input type="checkbox"/> Microbiology (NDSU) <input type="checkbox"/> Molecular and Integrative Biology (UND) <input type="checkbox"/> Natural Resources Management (NDSU) <input type="checkbox"/> Physics (NDSU, UND) <input type="checkbox"/> Statistics (NDSU) | <input type="checkbox"/> Aerospace Sciences (UND) <input type="checkbox"/> Atmospheric Sciences (UND) <input type="checkbox"/> Biochemistry (NDSU) <input type="checkbox"/> Biological Sciences (NDSU, UND) <input type="checkbox"/> Biomedical Engineering (NDSU) <input type="checkbox"/> Chemistry (NDSU, UND) <input type="checkbox"/> Computer Science (NDSU, UND) <input type="checkbox"/> Data Science (UND) <input type="checkbox"/> Earth System Science and Policy (UND) <input type="checkbox"/> Entomology (NDSU) <input type="checkbox"/> Environmental/Conservation Science (NDSU, SBC) <input type="checkbox"/> Geology (UND) <input type="checkbox"/> Horticulture (NDSU) <input type="checkbox"/> Materials and Nanotechnology (NDSU) <input type="checkbox"/> Mathematics (NDSU, UND) <input type="checkbox"/> Microbiology (NDSU) <input type="checkbox"/> Physics (NDSU, UND) <input type="checkbox"/> Plant Pathology (NDSU) <input type="checkbox"/> Plant Sciences (NDSU) <input type="checkbox"/> Scientific Computing (UND) <input type="checkbox"/> Statistics (NDSU) |

North Dakota Postsecondary Institutions Offering STEM Related Programs

| | | | | | |
|--------------|------------------------------------|--------------------------------------------------------------------|-------------|-----------------------------------|--------------------------------------------------------------------|
| BSC | Bismarck State College | www.bismarckstate.edu | NHSC | Nueta Hidatsa Sahnish College | http://nhsc.edu |
| CCCC | Cankdeska Cikana Community College | www.littlehoop.edu | SBC | Sitting Bull College | www.sittingbull.edu |
| DCB | Dakota College at Bottineau | www.dakotacollege.edu | TMCC | Turtle Mountain Community College | www.tm.edu |
| DSU | Dickinson State University | www.dickinsonstate.edu | UTTC | United Tribes Technical College | www.uttcc.edu |
| LRSC | Lake Region State College | www.lrsc.edu | UJ | University of Jamestown | www.uj.edu |
| MaSU | Mayville State University | www.mayvillestate.edu | UM | University of Mary | www.umary.edu |
| MiSU | Minot State University | www.minotstate.edu | UND | University of North Dakota | www.und.edu |
| NDSCS | ND State College of Science | www.ndscs.edu | VCSU | Valley City State University | www.vcsu.edu |
| NDSU | ND State University | www.ndsu.edu | WSC | Williston State College | www.willistonstate.edu |



Name _____

Transportation, Distribution & Logistics Career Cluster

| Pathway | OCCUPATIONS RELATING TO THIS CAREER CLUSTER |
|-------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Facility & Mobile Equipment Maintenance | Automotive Service Technician • Collision Repair Technician • Diesel Engine Specialist • Service Manager • Electrical/Electronic Technician • Industrial Electrician |
| Health, Safety & Environmental Management | Industrial Health & Safety Engineer • Safety Analyst • Environmental Scientist • First Responder • Environmental Compliance Specialist • Risk Manager |
| Logistics Planning & Management Services | Logistic Manager • Logistics Analyst • Logistician • Logistic Consultant • International Logistics Specialists • Logistic Engineer |
| Sales & Service | Marketing Manager • Sales Representative • Cargo and Freight Agent • Customer Service Representative • Customer Order and Billing Clerk • Sales Manager |
| Transportation Operations | Pilot • Flight Engineer • Truck Driver • Bus Driver • Dispatchers • Air Traffic Controller • Transportation Managers • Locomotive Engineer • Flight Attendant |
| Transportation Systems/Infrastructure Planning, Management & Regulation | Aviation Inspector • Logistics System Manager • Surveying and Mapping Technician • Motor Vehicle Inspector • Transportation Engineer • Freight Inspector |
| Warehousing & Distribution Center Operations | Warehouse Manager • Shipping & Receiving Clerk • Production/Planning/Expediting Clerk • Laborer & Material Handler • Industrial and Packaging Engineers |

| HIGH SCHOOL COURSE REQUIREMENTS | | | | |
|---------------------------------------------------------------------------------|-------------------------------------------------|---------------------------------------------------------|----------------------------------------------------------------------|---------------------------------------------------------------------|
| English | Math | Science | Social Studies | Physical Education |
| Four units required to graduate; including literature, composition, and speech. | Three units required to graduate | Three units required to graduate. | Three units required to graduate. | One unit required to graduate. |
| Choices may include: | Choices may include: | Required Units: | Required Units: | Required Units: |
| <input type="checkbox"/> English 9 05071 | <input type="checkbox"/> Algebra I 11031 | <input type="checkbox"/> Physical Science 13030 | <input type="checkbox"/> U.S. History 15085 | <input type="checkbox"/> Physical Education 1 unit 08030 |
| <input type="checkbox"/> English 10 05072 | <input type="checkbox"/> Geometry 11120 | <input type="checkbox"/> Biology 13020 | <input type="checkbox"/> American Government ½ unit AND 15111 | OR |
| <input type="checkbox"/> English 11 05073 | <input type="checkbox"/> Advanced Algebra 11032 | <input type="checkbox"/> One additional unit of Science | <input type="checkbox"/> Economics ½ unit 15060 | <input type="checkbox"/> Physical Education ½ unit AND 08030 |
| <input type="checkbox"/> English 12 05074 | | OR | OR | <input type="checkbox"/> Health ½ unit 18010 |
| | | <input type="checkbox"/> Biology 13020 | <input type="checkbox"/> Problems of Democracy 1 unit 15201 | |
| | | <input type="checkbox"/> Chemistry 13031 | Additional units may include: | |
| | | <input type="checkbox"/> Physics 13042 | <input type="checkbox"/> Civics | |
| | | | <input type="checkbox"/> Geography | |
| | | | <input type="checkbox"/> Psychology | |
| | | | <input type="checkbox"/> World History | |

| Career & Technical Education Electives | | | Extended Learning Opportunities | |
|----------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|------------------------------------------------------|---------------------------------|---------------------------------------------------|
| Three units of foreign or Native American language, fine arts, or career and technical education are required to graduate. | | | | |
| Trade, Industry & Technical Education | <input type="checkbox"/> Recreational Small Engine Technology I 17310 | <input type="checkbox"/> SkillsUSA | School-Based: | Community Based: |
| <input type="checkbox"/> Aviation Technology I 17812 | <input type="checkbox"/> Recreational Small Engine Technology II 17311 | <input type="checkbox"/> TSA | | <input type="checkbox"/> Mentorship |
| <input type="checkbox"/> Aviation Technology II 17813 | <input type="checkbox"/> Commercial Driver License 17045 | <input type="checkbox"/> FCCLA | | <input type="checkbox"/> Volunteer |
| <input type="checkbox"/> Auto Tech I 17032 | | <input type="checkbox"/> DECA | | <input type="checkbox"/> Part-time Employment |
| <input type="checkbox"/> Auto Tech II 17037 | Business Education | <input type="checkbox"/> FFA | | <input type="checkbox"/> Service Learning Project |
| <input type="checkbox"/> Auto General Service Tech I 17038 | <input type="checkbox"/> Communication Technologies 14028 | <input type="checkbox"/> FBLA | | <input type="checkbox"/> Job Shadow |
| <input type="checkbox"/> Auto General Service Tech II 17039 | <input type="checkbox"/> Business Communication 14060 | <input type="checkbox"/> Career Research | | <input type="checkbox"/> Internship |
| <input type="checkbox"/> Electrical Technology 17125 | <input type="checkbox"/> Operations Management 14234 | <input type="checkbox"/> Cooperative Work Experience | | |
| <input type="checkbox"/> Diesel Technology 17040 | | | | |
| <input type="checkbox"/> Electronics Technology I 17150 | Information Technology Education | | | |
| <input type="checkbox"/> Electronics Technology II 17151 | <input type="checkbox"/> Intro to IT 27101 | | | |
| <input type="checkbox"/> Electronics Technology III 17152 | <input type="checkbox"/> IT Essentials 2 27220 | | | |
| <input type="checkbox"/> Welding Technology I 17236 | <input type="checkbox"/> Geographic Info Systems (GIS) 27400 | | | |
| <input type="checkbox"/> Welding Technology II 17237 | | | | |
| <input type="checkbox"/> Parts & Merchandise Management 17035 | Technology & Engineering Education | | | |
| <input type="checkbox"/> Auto Collision Tech I 17030 | <input type="checkbox"/> Energy & Transportation Technology 10331 | | | |
| <input type="checkbox"/> Auto Collision Tech II 17031 | <input type="checkbox"/> Communication Technology 10251 | | | |
| <input type="checkbox"/> Diesel Tech 17040 | | | | |

North Dakota Transportation, Distribution & Logistics Related Postsecondary Programs

| Pathway | Certificate or Associate's Degree | Bachelor's Degree | Master's Degree or More |
|-------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Facility & Mobile Equipment Maintenance | <input type="checkbox"/> Auto Body Repair and Refinishing Technology (NDSCS) <input type="checkbox"/> Auto Collision Technology (BSC) <input type="checkbox"/> Auto Technology (BSC, BJCC, LRSC, NDSCS, UTTC) <input type="checkbox"/> Case IH Technology (NDSCS) <input type="checkbox"/> Caterpillar Dealer Service Technician (NDSCS) <input type="checkbox"/> Electronics Technology (BSC) <input type="checkbox"/> Electronics/Telecommunications Technology (BSC) <input type="checkbox"/> General Diesel Technology (NDSCS) <input type="checkbox"/> Geographic Information Systems Technology (BSC) <input type="checkbox"/> John Deere Technology (NDSCS) <input type="checkbox"/> Komatsu Technology (NDSCS) <input type="checkbox"/> Power Sports Technology (NDSCS) <input type="checkbox"/> Transportation Technology (WSC) <input type="checkbox"/> Unmanned Aircraft Systems (NDSCS) | | |
| Health, Safety & Environmental Management | | <input type="checkbox"/> Environmental Design (NDSU) <input type="checkbox"/> Environmental Health (DSU) | |
| Logistics Planning & Management Services | <input type="checkbox"/> Information Processing Specialist (BSC) <input type="checkbox"/> Information and Communications Technology (NDSCS) <input type="checkbox"/> Information Technology (DCB, LRSC, WSC) <input type="checkbox"/> Management Information Systems transfer (NDSCS) | <input type="checkbox"/> Business Process Integration Management (VCSU) <input type="checkbox"/> Information Technology Management (UM) <input type="checkbox"/> Management Information Systems (MiSU, NDSU) <input type="checkbox"/> Operations/Supply Chain & Logistics Mgmt. (RU, UND) | <input type="checkbox"/> Project Management (UM) <input type="checkbox"/> Public Administration (UM) <input type="checkbox"/> Transportation and Urban Systems (NDSU) |
| Sales & Service | <input type="checkbox"/> Business Management (NDSCS, RU, WSC) <input type="checkbox"/> Marketing & Management transfer (DCB) | <input type="checkbox"/> Airport Management (UND) <input type="checkbox"/> Marketing (MiSU, NDSU, RU, UM, UND) | |
| Transportation Operations | <input type="checkbox"/> Airline Transport Pilot (FFS) <input type="checkbox"/> Commercial Pilot (EATC, FFS, GFKFS) <input type="checkbox"/> Commercial Vehicle Operations (TMCC) <input type="checkbox"/> CDL/Heavy Equipment (CCCC, SBC, TMCC, UTTC) <input type="checkbox"/> Instrumental/Multi-Engine Rating (EATC, FFS, GFKFS) <input type="checkbox"/> Private Pilot/Drone Training (EATC, FFS, GFKFS) <input type="checkbox"/> Recreational/Sport Pilot (EATC) | <input type="checkbox"/> Air Traffic Management (UND) <input type="checkbox"/> Commercial Aviation (UND) <input type="checkbox"/> Aviation Management (UND) <input type="checkbox"/> Aviation Studies (UND) <input type="checkbox"/> Unmanned Aircraft System Operations (UND) | <input type="checkbox"/> Aerospace Sciences (UND) <input type="checkbox"/> Aviation (UND) <input type="checkbox"/> Unmanned Aircraft Systems Engineering (UND) |
| Transportation Systems/Infrastructure Planning, Management & Regulation | | <input type="checkbox"/> Airport Management (UND) | <input type="checkbox"/> Public Administration (UND) <input type="checkbox"/> Transportation and Urban Systems (NDSU) |
| Warehousing & Distribution Center Operations | <input type="checkbox"/> Management (BSC) <input type="checkbox"/> Business Management (NDSCS) | <input type="checkbox"/> Business Process Integration Management (VCSU) | |

North Dakota Postsecondary Institutions Offering Transportation, Distribution & Logistics Related Programs

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|-------|------------------------------------|---------------------------------------------------------------------------------------|-------|-----------------------------------|--------------------------------------------------------------------|
| BSC | Bismarck State College | www.bismarckstate.edu | NDSCS | ND State College of Science | www.ndscs.edu |
| BJCC | Burdick Job Corps Center | http://quentinnburdick.jobcorps.gov | NDSU | ND State University | www.ndsu.edu |
| CCCC | Cankdeska Cikana Community College | www.littlehoop.edu | NHSC | Nueta Hidatsa Sahnish College | http://nhsc.edu |
| DCB | Dakota College at Bottineau | www.dakotacollege.edu | RU | Rasmussen University | www.rasmussen.edu |
| DSU | Dickinson State University | www.dickinsonstate.edu | SBC | Sitting Bull College | www.sittingbull.edu |
| EATC | Executive Air Taxi Corporation | www.executive-air.com | TMCC | Turtle Mountain Community College | www.tm.edu |
| FFS | Fargo Flight School | www.fargojet.com/school | UTTC | United Tribes Technical College | www.uttc.edu |
| GFKFS | GFK Flight Support | www.flygfk.com | UM | University of Mary | www.umary.edu |
| LRSC | Lake Region State College | www.lrsc.edu | UND | University of North Dakota | www.und.edu |
| MAC | Minot Aero Center | http://minotaerocenter.com | VCSU | Valley City State University | www.vcsu.edu |
| MiSU | Minot State University | www.minotstateu.edu | WSC | Williston State College | www.willistonstate.edu |