



NORTH DAKOTA

Career and Technical Education

Preparing Tomorrow's Workforce

North Dakota Career and Technical Education

CTE Capital Projects Program

2021 Legislative Session

- \$88.3M for construction, renovation, maintenance and equipment for new and expanding CTE Centers and facilities
 - Preference provided for applications that foster cross district partnerships
 - Preference provided for applications involving Post-Secondary Partnerships
 - Preference provided for applications involving Workforce Training Partnerships
- 1-1 matching grant
- Grant range will be \$500,000 to \$10M

2023 Legislative Session – Project Inflationary Funding

- Additional \$26.5M – SIIF
- Additional \$6M – CCPF

Bakken Area Skills Center – Watford City

Program Areas Offered

- Agricultural Education
- Automation
- Automotive Technology
- Aviation
- Business
- Building Trades
- Engineering
- Family & Consumer Sciences
- Heavy Equipment Operator / CDL
- Health Sciences
- Information Technology
- Petroleum Technology
- Welding

Ten school districts included as partners.



BASC
Bakken Area Skills Center

Bismarck Career Academy - Silver Ranch - Bismarck

Program Areas Offered

- Building Trades
 - Plans to move into HVAC, Plumbing, Electrical
- Agricultural Education

Multi School District Partnerships are in the works.



Cass County CTE Center/ Career Innovation Center – Fargo

Program Areas Offered

- Allied Health
- Agricultural Science and Precision Technology
- Construction and Building Trades

Strong NDSCS presence at the CIC

Four school districts included as partners



Career Impact Academy – Grand Forks

Program Areas Offered

- Agriculture
- Advanced Manufacturing
- Aviation - Aerospace and Unmanned Systems
- Automotive Services
- Building Trades
- Computer Science/Information Technology
- Culinary Arts
- Health Sciences
- Technology and Engineering

Eight school districts included as partners



Heart River Area Career & Technology Center – Mandan

Program Areas Offered

- Agricultural Education
- Building Trades
- Health Sciences
- Technology and Engineering
- Welding

Eleven school districts included as partners



James Valley Area CTE Center – Jamestown – Expansion

Program Areas Offered

- Agricultural Education
- Automotive Collision
- Automotive Technology
- Aviation
- Building Trades
- Business
- Culinary Arts
- Early Childhood Education
- Health Science Careers
- IT and Cybersecurity
- Machine Tooling and Welding
- Welding

Four school districts included as partners



James Valley Career & Technology Center

Lake Area CTE Center – Devils Lake – Expansion

Program Areas Offered

- Agricultural Education
- Automotive Technology
- Business Education
- Child and Family Services
- Construction
- Culinary Arts
- Health Sciences
- Marketing
- Welding

Five school districts included as partners



Minot Area Workforce Academy - Minot

Program Areas Offered

- Automotive Collision
- Automotive Technology
- Aviation
- Commercial Driver's License
- Construction Technology
- Early Childhood Education
- Health Sciences – Medical Careers
- Health Sciences – Biomedical
- Teaching Pathway

Four school districts included as partners



North Valley Area CTC – Grafton – Expansion

Program Areas Offered

- Agricultural Education
- Auto Technology
- Building Trades
- Business Education
- Commercial Driver's License
- Health Science Education
- Information Technology
- Marching Technology
- Marketing Education
- Welding Technology

Eight school districts included as partners



Sheyenne Valley Area CTC – Valley City – Expansion

Program Areas Offered

- Agricultural Education
- Automotive Technology
- Construction Technology
- Graphic Communication
- Health Sciences
- Information Technology Education
- Unmanned Aircraft Systems
- Welding

Four school districts included as partners



Southeast Region CTC – Wahpeton – Expansion

Program Areas Offered

- Agricultural Education
- Automotive Technology
- Diesel Technology
- Building Trades
- Business Education
- Family and Consumer Sciences
- Health Sciences Education/EMT
- Marketing Education/Cyber
- Restaurant Management
- Welding Technology

Thirteen school districts included as partners



Southwest Area CTE Academy – Dickinson

Program Areas Offered

- Agricultural Education
- Automotive Technology
- Building Trades
- Business Education
- Commercial Driver's License
- Culinary Arts
- Diesel Technology
- Drafting
- Family and Consumer Science
- Fire Fighting
- Health Sciences
- Heavy Equipment Operator
- Information Technology Education
- Law Enforcement
- Welding Technology

Seven school districts included as partners



Williston Based CTE Center - Williston

Program Areas Offered

- Agricultural Education
- Automotive Technology
- Aviation Technology
- Building Trades
- Business Education
- Commercial Driver's License
- Culinary Arts
- EMT/Firefighter
- Family & Consumer Sciences Education
- Health Sciences Education
- Marketing Education
- Welding Education

Four school districts included as partners



Modernized Career Clusters

Purpose Statement

The National Career Clusters Framework provides structural alignment and a **common language** to **bridge education and work**, empowering **each learner** to explore, decide on, and prepare for **dynamic and evolving careers**.

Key Terminology

Cluster Groupings (6)

Large purpose-driven meta-sectors that help guide learners toward Clusters that are aligned with their interests, their sense of purpose, and the impact they want to make on their communities.

Career Clusters (14)

Industry sectors as defined by groupings from Standard Occupational Classification and North American Industry Classification System codes.

Sub-Clusters (72)

Major groupings of career areas within a given field that have similar skills as defined by industry area.

Cross-Cutting Clusters (3)

Clusters that are based on both sector-specific and contextualized functions instead of purely discrete industry sectors. These Clusters have both Sub-Clusters and implications for courses taken in all other Career Clusters.

Career Ready Practices (12)

The Career Ready Practices, built on a meta-analysis of over 30 different listings of general professional skills developed by industry and educational institutions, represent the skills needed to succeed in the modern workplace. These practices should be embedded across the pre-kindergarten to workforce continuum.

The Framework: Grid View



North Dakota CTE – Education Programs of Study

ND In – Demand Occupations: Instructional Coordinators, Teachers Adult Basic & English as a Second Language Instructors Career/Technical Education Teachers, Secondary School Elementary, Middle & Secondary School Teachers, Kindergarten Teachers, Special Education Teachers, Teachers & Instructors, All Other

Education – Early Childhood Development

Overview

Prepares students for careers in early learning settings, childcare centers, and preschool programs.

Suggested Grade Sequence

Grade 9–10

09026 Child Development

Grade 10–11

09130 Parenting

Grade 11–12

09211 Early Childhood Care and Education Services

Grade 12

09250 Occupational Experience

09299 Cooperative Work Experience

Recommended Prerequisites

Child Development recommended before other classes.

Potential Industry Certifications

CDA (Child Development Associate), First Aid/CPR.

Recommended Lab Equipment

Early childhood lab with age-appropriate toys, manipulatives, and observation equipment.

Dual Credit / Articulation Ideas

Dual credit with Early Childhood programs at BSC, Lake Region, DCB.

Capstone/WBL

09299 Cooperative Work Experience – Early Childhood

North Dakota CTE – Healthcare & Human Services Programs of Study

ND In – Demand Occupations: Athletic Trainers, Dental Assistants, Dental Hygienists, Diagnostic Medical Sonographers, Dietitians & Nutritionist, Healthcare Practitioners & Technical Workers, All Other, Massage Therapists, Medical Assistants, Medical Records Specialists, Nursing Assistants, Licensed Practical & Licensed Vocational Nurses, Registered Nurse, Occupational Therapy Assistants, Phlebotomists, Physical Therapist Assistants, Respiratory Therapists, Cardiovascular Technologists & Technicians, Clinical Laboratory Technologists & Technicians, Emergency Medical Technicians & Paramedics, Health Information Technologists & Medical Registrars, Health Technologists & Technicians, All Other, Magnetic Resonance Imaging Technologists, Ophthalmic Medical Technicians, Radiologic Technologists and Technicians, Surgical Assistants & Technologists, Veterinary Technologists & Technicians

Healthcare & Human Services – Personal Care Services

Overview

Prepares students for wellness, rehabilitation, and personal care occupations.

Suggested Grade Sequence

Grade 9–10

07033 Health Science I

Grade 10–11

07034 Prevention & Care of Athletic Injuries

Grade 11–12

07035 Health Science II

Grade 12

07950 Capstone – Health Sciences

07999 Health Education Supervised Occupational Experience

Recommended Prerequisites

Health Science I before Injury Prevention or Health Science II.

Potential Industry Certifications

First Aid/CPR, OSHA-10 Healthcare, Personal Training certificate (optional).

Recommended Lab Equipment

Athletic training kits, therapy equipment, mannequins.

Dual Credit / Articulation Ideas

Articulation with sports medicine, kinesiology, or physical therapy assistant programs.

Capstone/WBL

07950 Capstone – Health Sciences

07999 Health Education Supervised Occupational Experience

North Dakota CTE – Advanced Manufacturing Programs of Study

ND In – Demand Occupations: Architects, Except Landscape & Naval, Architectural and Civil Drafters, Architectural & Engineering Managers, Bioengineers & Biomedical Engineers, Chemical Engineers, Civil Engineers, Electrical Engineers, Electronics Engineers, Except Computers, Engineers, All Other, Environmental Engineers, Industrial Engineers, Mechanical Engineers, Petroleum Engineers, Surveyors, Civil Engineering Technologists and Technicians, Electrical & Electronic Engineering Technologists & Technicians, Electro-Mechanical & Mechatronics Techs, Engineering Technologists and Technicians, Except Drafters, All Others, Industrial Engineering Technologists & Technicians, Mechanical Engineering Technologists & Technicians

Advanced Manufacturing – Production & Automation

Overview

Careers centered on the hands-on management and execution of manufacturing processes. This field involves automation, overseeing production lines, quality control, assembly and product finishing, and ensuring efficient workflow. This Sub-Cluster includes specialized sectors such as processed food and beverage production and textile manufacturing, emphasizing efficiency and adherence to industry standards across diverse production types.

Recommended Prerequisites

Manufacturing and Manufacturing Technology prior to Automated Manufacturing.

Suggested Grade Sequence

Grade 9–10

37140 – Manufacturing

Grade 10–11

10121 – Manufacturing Technology

Grade 11–12

17113 – Automated Manufacturing

Grade 12

10999 – Cooperative Work Experience – T&E

17950 – Technical & Industrial Capstone

17999 – Cooperative Work Experience – T&I

Capstone / WBL

10999 – Cooperative Work Experience – T&E

17950 – Technical & Industrial Capstone

17999 – Cooperative Work Experience – T&I

Potential Industry Certifications

MSSC Certified Production Technician, OSHA-10 General Industry.

Dual Credit / Articulation

NDSCS Mechatronics, BSC Automation programs.

Thank you!!

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