

Preparing Tomorrow's Workforce

#### **Coordinated Plan of Study**

#### North Dakota Career and Technical Education or Academic Scholarship **AGRICULTURAL EDUCATION**

Agriculture, Food & Natural Resources Career Cluster			
Course Code	Description		
01011	Introduction to Agriculture		
01021	Agriscience Technology I		
01012	Foundations of Agriculture		
01022	Agriscience Technology II		
01073	Agriculture III		
01023	Agriscience Technology III		
01074	Agriculture IV		
01080	CASE – Intro to AFNR		
	Agribusiness Systems		
	Pathway		
Course Code	Description		
01034	Agricultural Sales & Service		
01035	Agricultural Business Management		
01069	World Agricultural Science and Technology		
01993	Community Development		
01995	Supervised Agricultural Experience		
01999	Cooperative Work Experience		
01990	Individual Agricultural Studies		

Agriculture, Food & Natural Resources		
	Career Cluster	
Course	Description	
Code	•	
01011	Introduction to Agriculture	
01021	Agriscience Technology I	
01012	Foundations of Agriculture	
01022	Agriscience Technology II	
01073	Agriculture III	
01023	Agriscience Technology III	
01074	Agriculture IV	
01080	CASE – Intro to AFNR	
	Animal Systems	
	Pathway	
Course Code	Description	
01081	CASE – Principles of Agricultural Science-Animal	
01061	Livestock Production	
01062	Equine Science	
01066	Small Animal Care	
01067	Veterinary Science	
01068	Agriculture Processing	
01069	World Agriculture Science and Technology	
01990	Individual Agricultural Studies	
01995	Supervised Agricultural Experience	
01999	Cooperative Work Experience	

Cooperative Work Experience
cure, Food & Natural Resources
Career Cluster
Description
Introduction to Agriculture
Agriscience Technology I
Foundations of Agriculture
Agriscience Technology II
Agriculture III
Agriscience Technology III
Agriculture IV
CASE – Intro to AFNR
Natural Resources
Pathway
Description
Botany/Horticulture Science I
Botany/Horticulture Science II
Natural/Environmental Resources
Vorld Agriculture Science and Technology
Individual Agricultural Studies
Community Development
Supervised Agricultural Experience
Cooperative Work Experience
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Agriculture, Food & Natural Resources		
Career Cluster		
Course Code	Description	
01011	1	
	Introduction to Agriculture	
01021	Agriscience Technology I	
01012	Foundations of Agriculture	
01022	Agriscience Technology II	
01073	Agriculture III	
01023	Agriscience Technology III	
01074	Agriculture IV	
01080	CASE – Intro to AFNR	
Environmental Services Systems		
	Pathway	
Course	Description	
Code		
01053 -		
	Botany/Horticulture Science	
54	Botany/Horticulture Science	
54 01043 -	<i>"</i>	
54 01043 - 44	Botany/Horticulture Science  Agricultural Mechanics Technology	
54 01043 -	<i>"</i>	
54 01043 - 44	Agricultural Mechanics Technology	
54 01043 - 44 01063	Agricultural Mechanics Technology  Natural/Environmental Resources	
54 01043 - 44 01063 01069	Agricultural Mechanics Technology  Natural/Environmental Resources  World Agricultural Science and Technology	
54 01043 - 44 01063 01069 01088	Agricultural Mechanics Technology  Natural/Environmental Resources  World Agricultural Science and Technology  CASE Environmental Issues	
54 01043 - 44 01063 01069 01088 01990	Agricultural Mechanics Technology  Natural/Environmental Resources  World Agricultural Science and Technology  CASE Environmental Issues  Individual Agricultural Studies	
54 01043 - 44 01063 01069 01088 01990 01993	Agricultural Mechanics Technology  Natural/Environmental Resources  World Agricultural Science and Technology  CASE Environmental Issues  Individual Agricultural Studies  Community Development	

Agriculture, Food & Natural Resources Career Cluster			
Course Code	Description		
01011	Introduction to Agriculture		
01021	Agriscience Technology I		
01012	Foundations of Agriculture		
01022	Agriscience Technology II		
01073	Agriculture III		
01023	Agriscience Technology III		
01074	Agriculture IV		
01080	CASE – Intro to AFNR		
	Natural Resources		
	Pathway		
Course Code	Description		
01053	Botany/Horticulture Science I		
01054	Botany/Horticulture Science II		
01063	Natural/Environmental Resources		
01069	World Agriculture Science and Technology		
01990	Individual Agricultural Studies		
01993	Community Development		
01995	Supervised Agricultural Experience		
01999	Cooperative Work Experience		

Agriculture, Food & Natural Resources Career Cluster			
Course Code	Description		
01011	Introduction to Agriculture		
01021	Agriscience Technology I		
01012	Foundations of Agriculture		
01022	Agriscience Technology II		
01073	Agriculture III		
01023	Agriscience Technology III		
01074	Agriculture IV		
01080	CASE – Intro to AFNR		
	Plant Systems		
	Pathway		
Course Code	Description		
01082	CASE – Principles of Agricultural Science-Plant		
01025	Agronomy Science		
01053	Botany/Horticulture Science I		
01054	Botany/Horticulture Science II		
01069	World Agriculture Science and Technology		
01990	Individual Agricultural Studies		
01995	Supervised Agricultural Experience		
01999	Cooperative Work Experience		

010/3	Agriculture III
01023	Agriscience Technology III
01074	Agriculture IV
01080	CASE – Intro to AFNR
Food Products & Processing Systems	
	Pathway
Course Code	Description
01068	Agriculture Processing
01990	Individual Agricultural Studies
01995	Supervised Agricultural Experience
01999	Cooperative Work Experience
Agric	culture, Food & Natural Resources
Agiii	
	Career Cluster
Course Code	Description
01011	Introduction to Agriculture
01021	Agriscience Technology I

Agriculture, Food & Natural Resources **Career Cluster** 

Description

Introduction to Agriculture

Agriscience Technology I

Foundations of Agriculture

Agriscience Technology II Agriculture III

Course

Code

01011 01021

01012

01022

7811	Career Cluster	
Course Code	Description	
01011	Introduction to Agriculture	
01021	Agriscience Technology I	
01012	Foundations of Agriculture	
01022	Agriscience Technology II	
01073	Agriculture III	
01023	Agriscience Technology III	
01074	Agriculture IV	
01080	CASE – Intro to AFNR	
Pow	er, Structural & Technical Systems	
	Pathway	
Course Code	Description	
01043	Agricultural Mechanics Technology I	
01044	Agricultural Mechanics Technology II	
01045	Agricultural Mechanics Power Systems	
01046	Agricultural Welding & Fabrication	
01047	Advanced Ag Welding & Fabrication	
01990	Individual Agricultural Studies	
01995	Supervised Agricultural Experience	
01999	Cooperative Work Experience	

- Student must complete at least 2 credits in one Career Cluster/Pathway.
- The top/blue section of the plan consists of more general courses that fit into the career cluster. The second/red section identifies a career pathway within that cluster and contains courses intended to better prepare students interested in that specific pathway.
- To complete two credits in a coordinated plan of study, a student chooses two or more courses to equal that number of credits, utilizing courses from both sections.



## Coordinated Plan of Study North Dakota Career and Technical Education or Academic Scholarship

#### **BUSINESS EDUCATION**

Business Management & Administration Career Cluster		
Course	Description	
Code	23337, 1333	
14230/	Business Fundamentals/	
04080	Principles of Marketing	
14060	Business Communication	
14010	Accounting I	
14011	Accounting II	
14095/	Financial Literacy/	
04081	Principles of Finance	
Administrative Support		
	Pathway	
Course Code	Description	
14025	Spreadsheets	
14096	Word Processing	
14098	Desktop Publishing	
14099	Multimedia I	
14100	Multimedia II	
14028	Communication Technologies	
14022	Web Design	
14026	Database	
14079	Business Technology & Procedures	
14999	Cooperative Work Experience	

Business Management & Administration Career Cluster			
Course Code	Description		
14230/	Business Fundamentals/		
04080	Principles of Marketing		
14060	Business Communication		
14010	Accounting I		
14011	Accounting II		
14016	Business Finance		
14090	Business Law		
14151	Economics (CTE)		
14024	Business Computer Applications		
14095/	Financial Literacy/		
04081	Principles of Finance		
	General Management		
	Pathway		
Course Code	Description		
14231	Management I*		
14232	Management II*		
14111	Entrepreneurship/		
04110	Principles of Entrepreneurship		
14233	Global Management		
14234	Operations Management		
14999	Cooperative Work Experience		

Finance		
Career Cluster		
Course		
Code	Description	
14230/	Business Fundamentals/	
04080	Principles of Marketing	
14060	Business Communication	
14010	Accounting I	
14011	Accounting II	
14016	Business Finance	
14090	Business Law	
14151	Economics (CTE)	
14024	Business Computer Applications	
14095/	Financial Literacy/	
04081	Principles of Finance	
	Accounting	
Pathway		
Course Code	Description	
14012	Accounting III	
14013	Accounting IV	
14014	Forensic Accounting	
14015	Entrepreneurial Accounting	
14025	Spreadsheets	
14999	Cooperative Work Experience	

- Student must complete at least 2 credits in one Career Cluster/Pathway.
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- To complete two credits in a coordinated plan of study, a student chooses two or more courses to equal that number of credits, utilizing courses from both sections.
- \*04223 Management can be used in place of 14231/2 Management I and II
- Gray cells are classes not funded by NDCTE.



## North Dakota Career and Technical Education or Academic Scholarship FAMILY & CONSUMER SCIENCES EDUCATION

Ť	Arts, A/V Technology & Communications Career Cluster		
Course Code	Description		
09022	Family & Consumer Sciences I		
09023	Family & Consumers Sciences II		
09024	Family and Consumer Sciences III		
09025	Independent Living		
09028	Consumer & Resource Management		
09140	Individual Family & Consumer Sciences Studies		
	Visual Arts		
	Pathway		
Course Code	Description		
09027	Clothing & Textiles I		
09029	Clothing & Textiles II		
09030	Fashion and Textile Trends		
09037	Current Topics in Textiles & Apparel		
09133	Housing & Living Environments		
09212	Clothing & Textiles Services		
09250	Occupational Exploration		
09299	Cooperative Work Experience		

09299	Cooperative work Experience		
	Hospitality & Tourism		
	Career Cluster		
Course Code	Description		
09022	Family & Consumer Sciences I		
09023	Family & Consumers Sciences II		
09024	Family and Consumer Sciences III		
09025	Independent Living		
09028	Consumer & Resource Management		
09140	Individual Family & Consumer Sciences Studies		
Restaurants & Food/Beverage Services			
Res	taurants & Food/Beverage Services		
Res	taurants & Food/Beverage Services Pathway		
Course Code			
Course	Pathway		
Course Code	Pathway  Description		
Course Code 09131 09135 09136	Pathway  Description  Nutrition & Food Prep I  Nutrition & Food Prep II  Cultures & Cuisines		
Course Code 09131 09135 09136 09137	Pathway  Description  Nutrition & Food Prep I  Nutrition & Food Prep II  Cultures & Cuisines  Nutrition & Fitness		
Course Code 09131 09135 09136 09137 09250	Pathway  Description  Nutrition & Food Prep I  Nutrition & Food Prep II  Cultures & Cuisines  Nutrition & Fitness  Occupational Exploration		
Course Code 09131 09135 09136 09137 09250 09213	Pathway  Description  Nutrition & Food Prep I  Nutrition & Food Prep II  Cultures & Cuisines  Nutrition & Fitness  Occupational Exploration  Food Service/Culinary Arts		
Course Code 09131 09135 09136 09137 09250	Pathway  Description  Nutrition & Food Prep I  Nutrition & Food Prep II  Cultures & Cuisines  Nutrition & Fitness  Occupational Exploration		

Education & Training Career Cluster	
Course Code	Description
09022	Family & Consumer Sciences I
09023	Family & Consumers Sciences II
09024	Family and Consumer Sciences III
09025	Independent Living
09028	Consumer & Resource Management
09140	Individual Family & Consumer Sciences Studies
	Teaching/Training
	Pathway
Course Code	Description
09026	Child Development
09041	Teaching Professional (CTE)
09042	Educational Methodology
09130	Parenting
09211	Early Childhood Care & Education Services
09250	Occupational Exploration
09299	Cooperative Work Experience

Human Services Career Cluster	
Course Code	Description
09022	Family & Consumer Sciences I
09023	Family & Consumers Sciences II
09024	Family and Consumer Sciences III
09025	Independent Living
09028	Consumer & Resource Management
09140	Individual Family & Consumer Sciences Studies
Early	<b>Childhood Development &amp; Services</b>
	Pathway
Course Code	Description
	Description Child Development
Code	
Code 09026 09129 09130	Child Development Individual & Family Health Parenting
Code 09026 09129 09130 09131	Child Development Individual & Family Health
Code 09026 09129 09130	Child Development Individual & Family Health Parenting
Code 09026 09129 09130 09131	Child Development Individual & Family Health Parenting Nutrition & Food Prep I
Code 09026 09129 09130 09131 09135	Child Development Individual & Family Health Parenting Nutrition & Food Prep I Nutrition & Food Prep II
Code 09026 09129 09130 09131 09135 09132	Child Development Individual & Family Health Parenting Nutrition & Food Prep I Nutrition & Food Prep II Family Living
Code 09026 09129 09130 09131 09135 09132 09137 09041	Child Development Individual & Family Health Parenting Nutrition & Food Prep I Nutrition & Food Prep II Family Living Nutrition & Fitness Teaching Professional (CTE) Educational Methodology
Code 09026 09129 09130 09131 09135 09132 09137 09041	Child Development Individual & Family Health Parenting Nutrition & Food Prep I Nutrition & Food Prep II Family Living Nutrition & Fitness Teaching Professional (CTE) Educational Methodology Occupational Exploration
Code 09026 09129 09130 09131 09135 09132 09137 09041	Child Development Individual & Family Health Parenting Nutrition & Food Prep I Nutrition & Food Prep II Family Living Nutrition & Fitness Teaching Professional (CTE) Educational Methodology

	Health Sciences Career Cluster
Course Code	Description
09022	Family & Consumer Sciences I
09023	Family & Consumers Sciences II
09024	Family and Consumer Sciences III
09025	Independent Living
09028	Consumer & Resource Management
09140	Individual Family & Consumer Sciences Studies
	Support Services
	Support Services Pathway
Course Code	
	Pathway
Code	Pathway  Description
Code 09129 09131 09135	Pathway  Description  Individual & Family Health
Code 09129 09131 09135 09137	Pathway  Description  Individual & Family Health  Nutrition & Food Prep I  Nutrition & Food Prep II  Nutrition & Fitness
Code 09129 09131 09135 09137	Pathway  Description  Individual & Family Health  Nutrition & Food Prep I  Nutrition & Food Prep II  Nutrition & Fitness  Food Science & Technology
Code 09129 09131 09135 09137	Pathway  Description  Individual & Family Health  Nutrition & Food Prep I  Nutrition & Food Prep II  Nutrition & Fitness

	Human Services
	Career Cluster
Course	Provide tion
Code	Description
09022	Family & Consumer Sciences I
09023	Family & Consumers Sciences II
09024	Family and Consumer Sciences III
09025	Independent Living
09028	Consumer & Resource Management
09140	Individual Family & Consumer Sciences Studies
	Family & Community Services
	Pathway
Course	Description
Code	Description
<b>Code</b> 09025	Independent Living
<b>Code</b> 09025 09026	Independent Living Child Development
Code 09025 09026 09129	Independent Living Child Development Individual & Family Health
<b>Code</b> 09025 09026	Independent Living Child Development
Code 09025 09026 09129	Independent Living Child Development Individual & Family Health
Code 09025 09026 09129 09130	Independent Living Child Development Individual & Family Health Parenting
Code 09025 09026 09129 09130 09131	Independent Living Child Development Individual & Family Health Parenting Nutrition & Food Prep I
Code 09025 09026 09129 09130 09131	Independent Living Child Development Individual & Family Health Parenting Nutrition & Food Prep I Nutrition & Food Prep II
Code 09025 09026 09129 09130 09131 09135 09132	Independent Living Child Development Individual & Family Health Parenting Nutrition & Food Prep I Nutrition & Food Prep II Family Living

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## North Dakota Career and Technical Education or Academic Scholarship HEALTH SCIENCES EDUCATION

Busin	Business Management & Administration Career Cluster	
Course Code	Description	
- 11		
П	uman Resources Management Pathway	
Course Code	Description	
07021	Sign Language I	
07022	Sign Language II	
07023	Sign Language III	
07024	Sign Language IV	
07025	Sign Language Cooperative Education	
07999	Health Education Supervised Occupational Experience	

	Health Science Career Cluster	
Course Code	Description	
37080	CTE Health Careers Cluster	
07033	Health Sciences I	
07035	Health Sciences II	
07036	Medical Terminology	
	Health Informatics	
	Pathway	
Course Code	Description	
07040	Medical Records	
07999	Health Education Supervised Occupational Experience	

Law, Public Safety, Corrections & Security Career Cluster			
Course Code	Description		
37080	CTE Health Careers Cluster		
07033	Health Sciences I		
07035	Health Sciences II		
07036	Medical Terminology		
La	Law Enforcement Services Pathway		
Course Code	Description		
07200	Law Enforcement		
07999	Health Education Supervised Occupational Experience		

	Health Science Career Cluster	
Course Code	Description	
37080	CTE Health Careers Cluster	
07033	Health Sciences I	
07035	Health Sciences II	
07036	Medical Terminology	
Biotec	chnology Research & Development	
	Pathway	
Course Code	Description	
10710	Biomedical Technology	
10730	PLTW Principles of Biomedical Science	
10732	PLTW Human Body Systems	
10734	PLTW Medical Interventions	
10736	PLTW Biomedical Innovation	
07999	Health Education Supervised Occupational Experience	

	Health Science		
	Career Cluster		
Course Code	Description		
37080	CTE Health Careers Cluster		
07033	Health Sciences I		
07035	Health Sciences II		
07036	Medical Terminology		
	Therapeutic Services		
	Pathway		
Course Code	Description		
07031	Nurse Assistant Foundations		
07032	Nurse Assistant		
07038	Introduction to Nursing		
07044	Emergency Medical Services Foundations		
07045	Emergency Medical Services		
07046	Advanced EMS		
07075	Pharmacy Technician		
07999	Health Education Supervised Occupational Experience		

Health Science Career Cluster	
Course Code	Description
37080	CTE Health Careers Cluster
07033	Health Sciences I
07035	Health Sciences II
07036	Medical Terminology
	Diagnostic Services
	Pathway
Course Code	Description
07034	Prevention/Care of Athletic Injuries
07999	Health Education Supervised Occupational Experience

Law, Public Safety, Corrections & Security Career Cluster		
Course Code	Description	
37080	CTE Health Careers Cluster	
07033	Health Sciences I	
07035	Health Sciences II	
07036	Medical Terminology	
Eme	rgency & Fire Management Services	
	Pathway	
Course Code	Description	
07100	Firefighting	
07999	Health Education Supervised	
07333	Occupational Experience	

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## North Dakota Career and Technical Education or Academic Scholarship INFORMATION TECHNOLOGY EDUCATION

	Information Technology		
	Career Cluster		
Course Code	Description		
27101	Intro to IT		
27280	Introduction to Cybersecurity		
23011	Computer Science Applications		
	Information Support & Services		
	Pathway		
Course Code	Description		
27111	Internet of Things Fundamentals		
27219	Computer Hardware and Operating Systems (A+)		
27220	IT Essentials 2		
27265	Introduction to Networking		
27266	CCNA Introduction to Networks		
27305	Essentials of Desktop Operating Systems – Linux		
27400	Geographic Info Systems (GIS)		
27995	IT Internship		
27999	Cooperative Work Experience		
51012	Governor's School: Information Technology		

	Information Technology Career Cluster		
Course Code	Description		
27101	Intro to IT		
27280	Introduction to Cybersecurity		
23011	Computer Science Applications		
	Network Systems		
	Pathway		
Course Code	Description		
27111	Internet of Things Fundamentals		
27219	Computer Hardware and Operating Systems (A+)		
27220	IT Essentials 2		
27265	Introduction to Networking		
27266	CCNA Introduction to Networks		
27267	CCNA Routing & Switching Essentials		
27268	CCNA Scaling Networks		
27269	CCNA Connecting Networks		
27305	Essentials of Desktop Operating Systems – Linux		
27995	IT Internship		
27999	Cooperative Work Experience		
51012	Governor's School: Information Technology		

Information Technology		
	Career Cluster	
Course Code	Description	
27101	Intro to IT	
27280	Introduction to Cybersecurity	
23011	Computer Science Applications	
Progr	amming & Software Development	
Pathway		
Course Code	Description	
27120	Intro to Programming Languages	
27122	Programming Essentials	
23012	CS Programming	
27123	Programming Essentials: Python	
27124	Programming Essentials: C++	
27125	Fundamentals of JAVA Programming	
27127	Advanced JAVA Programming	
23015	Advanced CS Programming	
27128	Mobile Applications Development	
27130	Computer Gaming and Design	
27131	Computer Gaming and Design 2	
27170	Introduction to Web Design	
27510	CTE AP CS Principles	
23582	AP Computer Science Principles	
27520	CTE AP CS A	
23580	AP Computer Science A	
10820	PLTW Cybersecurity	
10810	PLTW Computer Science Essentials	
10815	PLTW Computer Science Principles	
27995	IT Internship	
27999	Cooperative Work Experience	
51012	Governor's School: Information Technology	

Information Technology Career Cluster			
Course Code	Description		
27101	Intro to IT		
27280	Introduction to Cybersecurity		
23011	Computer Science Applications		
W	Web and Digital Communications		
	Pathway		
Course Code	Description		
17140	Audio/Visual Production		
27102	Computer Software Application		
27128	Mobile Applications Development		
27130	Computer Gaming and Design		
27131	Computer Gaming and Design 2		
27170	Introduction to Web Design		
27400	Geographic Info Systems (GIS)		
27995	IT Internship		
27999	Cooperative Work Experience		

- Student must complete at least 2 credits in one Career Cluster/Pathway.
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04215

04245

04310

04082

04111

04290

04999

# Coordinated Plan of Study North Dakota Career and Technical Education or Academic Scholarship MARKETING EDUCATION

	Marketing	
	Career Cluster	
Course Code	Description	
04080/	Principles of Marketing/	
14230	Business Fundamentals	
04210	Marketing I	
04235	Social Media Marketing	
04081/	Principles of Finance/	
14095	Financial Literacy	
04110	Principles of Entrepreneurship/	
14111	Entrepreneurship	
	Marketing Management	
	Pathway	
Course Code	Description	

Marketing II

Hospitality Marketing

International Marketing

**Business Finance** 

Entrepreneurship

School Based Enterprise

Cooperative Work Experience

Marketing Career Cluster		
Course Code	Description	
04080/	Principles of Marketing/	
14230	Business Fundamentals	
04239	Principles of Sports & Entertainment Marketing	
04210	Marketing I	
04235	Social Media Marketing	
04081/	Principles of Finance/	
14095	Financial Literacy	
Profess	sional Sales/Merchandising/	
Market	ing Communication Pathway	
Course Code	Description	
04215	Marketing II	
04223/14231	Management/	
& 14232	Management I & II	
04240	Sports & Entertainment Marketing	
04290	School Based Enterprise	
04999	Cooperative Work Experience	

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## North Dakota Career and Technical Education or Academic Scholarship TECHNOLOGY & ENGINEERING EDUCATION

Manufacturing			
	Career Cluster		
Course Code	Description		
10510	Invention & Innovation		
10515	Technological Systems		
M	Manufacturing Production Process		
	Development Pathway		
Course Code	Description		
10093	*Applying Technology		
10111	*Construction Technology		
10121	*Manufacturing Technology		
10251	*Communication Technology		
10259	*Design/Drafting		
10260	*3D Modeling & Design		
10331	*Energy & Transportation Technology		
10411	*Robotics Engineering		
10950	Capstone-Technology & Engineering Education		
10999	Cooperative Work Experience		

Science, Technology, Engineering & Mathematics Career Cluster		
Course Code	Description	
10510	Invention & Innovation	
10515	Technological Systems	
	Engineering & Technology	
	Pathway	
Course Code	Description	
10094	Foundations of Technology	
10096	Technology & Society	
10338	Advanced Design Applications	
10339	Advanced Technological Applications	
10410	Technological Design	
10411	*Robotics Engineering	
10415	Engineering Design	
10511	**PLTW Introduction to Engineering Design	
10512	**PLTW Digital Electronics	
10513	**PLTW Principles of Engineering	
10514	**PLTW Civil Engineering and Architecture	
10518	**PLTW Environmental Sustainability	
10610	STEM Seminar	
10520	**PLTW Engineering Essentials	
10519	**PLTW Engineering Design and Development	
10950	Capstone-Technology & Engineering Education	
10999	Cooperative Work Experience	

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- The top/blue section of the plan consists of more general courses that fit into the career cluster. The second/red section identifies a career pathway within that cluster and contains courses intended to better prepare students interested in that specific pathway.
- To complete two credits in a coordinated plan of study, a student chooses two or more courses to equal that number of credits, utilizing courses from both sections.
- \*No CTE recommended curriculum Available.
- \*\*PLTW Endorsement required to teach this course.



## North Dakota Career and Technical Education or Academic Scholarship TRADE, INDUSTRY & TECHNICAL EDUCATION

Agriculture, Food & Natural Resources Career Cluster	
Course Code	Description
Code	
	Natural Resource Systems Pathway
Course Code	Description
17410	Exploration of Oil Industry
17413	Petroleum Industry Skills
17421	Energy: Equipment & Systems
17422	Energy: Print Reading
17423	Energy: Industry Science
17950	T&I Capstone
17999	Cooperative Work Experience

Architecture & Construction Career Cluster			
Course			
Code	Description		
37020	Architecture & Construction Cluster		
Construction			
	Pathway		
Course Code	Description		
17100	Building Trades I		
17117	Building Trades II		
17101	Building Trades Summer Academy		
17045	Commercial Driver License		
17125	Electrical Technology		
17150	Electronics Technology I		
17151	Electronics Technology II		
17152	Electronics Technology III		
17105	Foundations of Building Trades		
17112	HVAC		
17120	Residential Plumbing		
17104	Woodworking		
17950	T&I Capstone		
17999	Cooperative Work Experience		

	Architecture & Construction Career Cluster	
Course Code	Description	
37020	Architecture & Construction Cluster	
Design/Pre-Construction Pathway		
Course Code	Description	
10511	*PLTW Introduction to Engineering Design (IED)	
17132	Computer-Aided Drafting	
17130	Drafting Technology I	
1/130		
17131	Drafting Technology II	
	Drafting Technology II Foundations of Building Trades	
17131		

Architecture & Construction Career Cluster	
Course Code	Description
37020	Architecture & Construction Cluster
	Maintenance/Operations
	Pathway
Course Code	Description
17150	Electronics Technology I
17151	Electronics Technology II
17152	Electronics Technology III
17110	Facilities Maintenance I
17118	Facilities Maintenance II
17201	Heavy Equipment Mechanics
17200	Heavy Equipment Operations
17112	HVAC
17120	Residential Plumbing
17950	T&I Capstone
17999	Cooperative Work Experience

Arts, AV Technology & Communications Career Cluster		
Course Code	Description	
37030	Arts, A/V Technology & Communications Cluster	
Visual Arts		
Pathway		
Course Code	Description	
17072	Commercial Art I	
17140	Audio/Visual Production	
17073	Commercial Art II	
17190	Graphic Communications I	
17191	Graphic Communications II	
17080	Photography	
17950	T&I Capstone	
17999	Cooperative Work Experience	

	Hospitality & Tourism Career Cluster	
Course Code	Description	
Restaurants & Food/Beverage Services Pathway		
Course Code	Description	
17050	Culinary Arts I	
17051	Culinary Arts II	
17050	T&I Capstone	
17950		

Transportation, Distribution & Logistics
Career Cluster

Manufacturing Career Cluster		
Course Code	Description	
37140	Manufacturing Cluster	
Manufacturing Production Process  Development Pathway		
Course Code	Description	
17150	Electronics Technology I	
17151	Electronics Technology II	
17152	Electronics Technology III	
17950	T&I Capstone	
17999	Cooperative Work Experience	

Manufacturing Career Cluster			
Course Code	Description		
37140	Manufacturing Cluster		
	Production		
	Pathway		
Course Code	Description		
17113	Automated Manufacturing		
17230	Machine Tooling Technology		
17238	Virtual Center Welding Technology Summer Academy		
17235	Welding Foundations		
17236	Welding Technology I		
17237	Welding Technology II		
17511	Mechanical Drive Systems		
17512	Hydraulic Fundamentals		
17950	T&I Capstone		
17999	Cooperative Work Experience		

Career Cluster		
Course Code	Description	
37170	Transportation, Distribution & Logistics Cluster	
Transportation Operations Pathway		
Course Code	Description	
17812	Aviation Technology I	
17813	Aviation Technology II	
17045	Commercial Driver License	
17814	Unmanned Aircraft Systems	
17950	T&I Capstone	
17999	Cooperative Work Experience	

- Description Code Transportation, Distribution & Logistics Cluster 37170 **Facility & Mobile Equipment Maintenance Pathway** Course Description Code 17030 Auto Collision Tech I 17031 Auto Collision Tech II 17038 Auto General Service Tech I 17039 Auto General Service Tech II 17032 Auto Tech I 17037 Auto Tech II Automotive Technology Summer Academy 17036 17040 Diesel Technology I 17041 Diesel Technology II 17150 Electronics Technology I 17029 Foundations of Automotive 17311 Recreational Small Engine Technology I 17310 Recreational Small Engine Technology II 17820 Aviation Mechanics T&I Capstone Cooperative Work Experience
- Student must complete at least 2 credits in one Career Cluster/Pathway.
- The top/blue section of the plan consists of more general courses that fit into the career cluster. The second/red section identifies a career pathway within that cluster and contains courses intended to better prepare students interested in that specific pathway.
- To complete two credits in a coordinated plan of study, a student chooses two or more courses to
  equal that number of credits, utilizing courses from both sections.
- \*PLTW Endorsement required to teach this course.