

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

| Agriculture, Food & Natural Resources<br>Career Cluster |   |  |  |
|---|---|--|--|
| Course<br>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<br>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           |  |  |

| Agr            | iculture, Food & Natural Resources<br>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<br>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                   |
| 01333          |  |

| Course Code  | Agriculture, Food & Natural Resources              |   |  |
|--|--|---|--|
| Description  | Career Cluster                                     |   |  |
| 1011   | 000.00   | Description   |  |
| 10021  |  | Introduction to Agriculture   |  |
| 1012   Foundations of Agriculture  |  |   |  |
| 01022   Agriscience Technology II  |  |   |  |
| 1073   |  |   |  |
| 01023  |  |   |  |
| 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                         |  |   |  |
| Course Code Description 01053 Botany/Horticulture Science I 01063 Natural/Environmental Resources  |  |   |  |
| Pathway           Course Code         Description           01053         Botany/Horticulture Science I           01054         Botany/Horticulture Science II           01063         Natural/Environmental Resources | 01080  |   |  |
| Course Code         Description           01053         Botany/Horticulture Science I           01054         Botany/Horticulture Science II           01063         Natural/Environmental Resources                   |  | Natural Resources   |  |
| Code         Description           01053         Botany/Horticulture Science I           01054         Botany/Horticulture Science II           01063         Natural/Environmental Resources                          |  | Pathway   |  |
| 01054 Botany/Horticulture Science II<br>01063 Natural/Environmental Resources  |  | Description   |  |
| 01063 Natural/Environmental Resources  | Couc   | 200.15.0  |  |
|  |  |   |  |
| 01069 World Agriculture Science and Technology   | 01053  | Botany/Horticulture Science I   |  |
|  | 01053<br>01054                                     | Botany/Horticulture Science I<br>Botany/Horticulture Science II   |  |
| 01990 Individual Agricultural Studies  | 01053<br>01054<br>01063                            | Botany/Horticulture Science I<br>Botany/Horticulture Science II   |  |
| 01993 Community Development  | 01053<br>01054<br>01063<br>01069                   | Botany/Horticulture Science I<br>Botany/Horticulture Science II<br>Natural/Environmental Resources<br>World Agriculture Science and Technology  |  |
| 01995 Supervised Agricultural Experience   | 01053<br>01054<br>01063<br>01069<br>01990          | Botany/Horticulture Science I Botany/Horticulture Science II Natural/Environmental Resources World Agriculture Science and Technology Individual Agricultural Studies                       |  |
| 01999 Cooperative Work Experience  | 01053<br>01054<br>01063<br>01069<br>01990<br>01993 | Botany/Horticulture Science I Botany/Horticulture Science II Natural/Environmental Resources World Agriculture Science and Technology Individual Agricultural Studies Community Development |  |

| Agriculture, Food & Natural Resources<br>Career Cluster |   |
|---|---|
| Course<br>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                      |
| Environmental Services Systems                          |   |
| Pathway   |   |
| Course<br>Code  | Description                               |
| 01053 –<br>54   | Botany/Horticulture Science               |
| 01043 -<br>44   | Agricultural Mechanics Technology         |
| 01063   | Natural/Environmental Resources           |
| 01069   | World Agricultural Science and Technology |
| 01088   | CASE Environmental Issues                 |
| 01990   | Individual Agricultural Studies           |
| 01993   | Community Development                     |
| 01995   | Supervised Agricultural Experience        |
| 01999   | Cooperative Work Experience               |

|                | culture, Food & Natural Resources<br>Career Cluster |
|----------------|---|
| Course<br>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<br>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                  |
|                | Cooperative Work Experience                         |

| Agriculture, Food & Natural Resources<br>Career Cluster |                                    |
|---|------------------------------------|
| Course<br>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               |
| Foo   | d Products & Processing Systems    |
|   | Pathway                            |
| Course<br>Code  | Description                        |
| 01068   | Agriculture Processing             |
| 01990   | Individual Agricultural Studies    |
| 01995   | Supervised Agricultural Experience |
| 01999   | Cooperative Work Experience        |

| Agriculture, Food & Natural Resources<br>Career Cluster |  |
|---|--|
| Course<br>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<br>Code  |  |
|   | Pathway  |
| Code  | Pathway  Description   |
| Code<br>01043   | Pathway  Description  Agricultural Mechanics Technology I  |
| Code<br>01043<br>01044                                  | Pathway  Description  Agricultural Mechanics Technology I  Agricultural Mechanics Technology II  |
| Code<br>01043<br>01044<br>01045                         | Pathway  Description  Agricultural Mechanics Technology I  Agricultural Mechanics Technology II  Agricultural Mechanics Power Systems  |
| Code<br>01043<br>01044<br>01045<br>01046                | Pathway  Description  Agricultural Mechanics Technology I  Agricultural Mechanics Technology II  Agricultural Mechanics Power Systems  Agricultural Welding & Fabrication                                |
| Code<br>01043<br>01044<br>01045<br>01046<br>01047       | Pathway  Description  Agricultural Mechanics Technology I Agricultural Mechanics Technology II Agricultural Mechanics Power Systems Agricultural Welding & Fabrication Advanced Ag Welding & Fabrication |

- 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 |                                  |
|---|----------------------------------|
|   | Career Cluster                   |
| Course  | Description                      |
| Code  | 2 con paon                       |
| 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  | Description                      |
| 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<br>Career Cluster |                                |
|--|--------------------------------|
| Course<br>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<br>Code   | Description                    |
| 14231  | Management I*                  |
| 14232  | Management II*                 |
| 14111  | 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<br>Code | Description                    |  |
| 14012          | Accounting III                 |  |
| 14013          | Accounting IV                  |  |
| 14014          | Forensic Accounting            |  |
| 14015          | Entrepreneurial Accounting     |  |
| 14025          | Spreadsheets                   |  |
| 14999          | Cooperative Work Experience    |  |
| 14333          | 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

| Arts, A/V Technology & Communications Career Cluster |   |
|--|---|
| Course<br>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<br>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                   |

| ••                    |   |  |  |
|-----------------------|---|--|--|
|                       | ·   |  |  |
| Hospitality & Tourism |   |  |  |
|                       | Career Cluster                                |  |  |
| Course<br>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 |  |  |
| Res                   | staurants & Food/Beverage Services            |  |  |
| Pathway               |   |  |  |
| Course<br>Code        | Description                                   |  |  |
| 09131                 | Nutrition & Food Prep I                       |  |  |
| 09135                 | Nutrition & Food Prep II                      |  |  |
| 09136                 | Cultures & Cuisines                           |  |  |
| 09137                 | Nutrition & Fitness                           |  |  |
| 09250                 | Occupational Exploration                      |  |  |
| 09213                 | Food Service/Culinary Arts                    |  |  |
| 09299                 | Cooperative Work Experience                   |  |  |

| Education & Training |   |  |  |
|----------------------|---|--|--|
| Course 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<br>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<br>Career Cluster |   |  |
|----------------------------------|---|--|
| Course<br>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                            | Early Childhood Development & Services        |  |
|                                  | Pathway                                       |  |
| Course<br>Code                   | Description                                   |  |
| 09026                            | Child Development                             |  |
| 09129                            | Individual & Family Health                    |  |
| 09130                            | Parenting                                     |  |
| 09131                            | Nutrition & Food Prep I                       |  |
| 09135                            | Nutrition & Food Prep II                      |  |
| 09132                            | Family Living                                 |  |
| 09137                            | Nutrition & Fitness                           |  |
| 09250                            | Occupational Exploration                      |  |
| 09211                            | Early Childhood Care & Education Services     |  |
| 09299                            | Cooperative Work Experience                   |  |

| Health Sciences<br>Career Cluster                 |  |  |
|---|--|--|
| Course<br>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   |  |
|   | Support Services Pathway   |  |
| Course<br>Code                                    |  |  |
|   | Pathway  |  |
| Code<br>09129<br>09131                            | Pathway  Description  Individual & Family Health  Nutrition & Food Prep I  |  |
| Code<br>09129<br>09131<br>09135                   | Pathway  Description  Individual & Family Health   |  |
| Code<br>09129<br>09131<br>09135<br>09137          | Pathway  Description  Individual & Family Health  Nutrition & Food Prep I  |  |
| Code<br>09129<br>09131<br>09135<br>09137<br>09138 | Pathway  Description  Individual & Family Health  Nutrition & Food Prep I  Nutrition & Food Prep II                      |  |
| Code<br>09129<br>09131<br>09135<br>09137          | Pathway  Description  Individual & Family Health  Nutrition & Food Prep I  Nutrition & Food Prep II  Nutrition & Fitness |  |

| Human Services |   |  |  |
|----------------|---|--|--|
| Career Cluster |   |  |  |
| Course<br>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<br>Code | Description                                   |  |  |
| 09025          | Independent Living                            |  |  |
| 09026          | Child Development                             |  |  |
| 09129          | Individual & Family Health                    |  |  |
| 09130          | Parenting                                     |  |  |
| 09131          | Nutrition & Food Prep I                       |  |  |
| 09135          | Nutrition & Food Prep II                      |  |  |
| 09132          | Family Living                                 |  |  |
| 09137          | Nutrition & Fitness                           |  |  |
| 09250          | Occupational Exploration                      |  |  |
| 09299          | Cooperative Work Experience                   |  |  |

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

## **HEALTH SCIENCES EDUCATION**

| Busin          | Business Management & Administration<br>Career Cluster |  |  |
|----------------|--|--|--|
| Course<br>Code | Description  |  |  |
| Н              | Human Resources Management Pathway                     |  |  |
| Course<br>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<br>Career Cluster                |  |  |
|---|--|--|
| Course<br>Code                                  | Description  |  |
| 37080   | CTE Health Careers Cluster                             |  |
| 07036   | Medical Terminology                                    |  |
| 07033   | Health Sciences I                                      |  |
| 07035   | Health Sciences II                                     |  |
| Biotechnology Research & Development<br>Pathway |  |  |
| Course<br>Code                                  | Description  |  |
| 10710   | Biomedical Technology                                  |  |
| 10730   | PLTW Principles of Biomedical Science                  |  |
| 10732   | PLTW Human Body Systems                                |  |
| 10734   | PLTW Medical Interventions                             |  |
| 07999   | Health Education Supervised<br>Occupational Experience |  |

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

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

|                | Health Science                                      |  |  |
|----------------|---|--|--|
|                | Career Cluster                                      |  |  |
| Course<br>Code | Description   |  |  |
| 37080          | CTE Health Careers Cluster                          |  |  |
| 07036          | Medical Terminology                                 |  |  |
| 07033          | Health Sciences I                                   |  |  |
| 07035          | Health Sciences II                                  |  |  |
|                | Therapeutic Services                                |  |  |
|                | Pathway   |  |  |
| Course<br>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  |  |  |
| 07999          | Health Education Supervised Occupational Experience |  |  |

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## **Coordinated Plan of Study** North Dakota Career and Technical Education or Academic Scholarship INFORMATION TECHNOLOGY EDUCATION

#### **Information Technology Career Cluster** Description Code 27101 Intro to IT

## 27280 Introduction to Cybersecurity 23011 **Computer Science Applications**

| Information Support & Services<br>Pathway |  |
|---|--|
| Course<br>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                      |
| 27300                                     | Essentials of Desktop Operating Systems            |
| 27305                                     | Essentials of Desktop Operating Systems –<br>Linux |
| 27400                                     | Geographic Info Systems (GIS)                      |
| 27995                                     | IT Internship                                      |
| 27999                                     | Cooperative Work Experience                        |

Governor's School: Information Technology

|                | Information Technology<br>Career Cluster           |  |  |
|----------------|--|--|--|
| Course<br>Code | Description  |  |  |
| 27101          | Intro to IT  |  |  |
| 27280          | Introduction to Cybersecurity                      |  |  |
| 23011          | Computer Science Applications                      |  |  |
|                | Network Systems                                    |  |  |
|                | Pathway  |  |  |
| Course<br>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 –<br>Linux |  |  |
| 27310          | Essentials of Network Operating Systems            |  |  |
| 27995          | IT Internship                                      |  |  |
| 27999          | Cooperative Work Experience                        |  |  |
| 51012          | Governor's School: Information Technology          |  |  |

|                | Information Technology                    |
|----------------|---|
|                | Career Cluster                            |
| Course         | Description                               |
| 27101          | Intro to IT                               |
| 27101          | Introduction to Cybersecurity             |
| 23011          | Computer Science Applications             |
|                |   |
| Progr          | amming & Software Development             |
|                | Pathway                                   |
| Course<br>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                |
| 27500          | Data Modeling & SQL                       |
| 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<br>Career Cluster |  |  |
|----------------|--|--|--|
| Course<br>Code | Description                              |  |  |
| 27101          | Intro to IT                              |  |  |
| 27280          | Introduction to Cybersecurity            |  |  |
| 23011          | Computer Science Applications            |  |  |
| W              | Web and Digital Communications           |  |  |
|                | Pathway                                  |  |  |
| Course<br>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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- 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.
- Gray cells are classes not funded by NDCTE.



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

| Marketing<br>Career Cluster |                                |
|-----------------------------|--------------------------------|
| Course<br>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 |
|                             | Marketing Management           |
|                             | Pathway                        |
| Course<br>Code              | Description                    |
| 04215                       | Marketing II                   |
| 04245                       | Hospitality Marketing          |
| 04310                       | International Marketing        |
| 04082                       | Business Finance               |
| 04111                       | Entrepreneurship               |
| 04290                       | School Based Enterprise        |
| 04999                       | Cooperative Work Experience    |

| Marketing      |   |  |  |
|----------------|---|--|--|
| Career Cluster |   |  |  |
| Course Code    | Description                                       |  |  |
| 04080/         | Principles of Marketing/                          |  |  |
| 14230          | Business Fundamentals                             |  |  |
| 04239          | Principles of Sports & Entertainment<br>Marketing |  |  |
| 04210          | Marketing I                                       |  |  |
| 04235          | Social Media Marketing                            |  |  |
| 04081/         | Principles of Finance/                            |  |  |
| 14095          | Financial Literacy                                |  |  |
| Profess        | Professional 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<br>Code | Description                         |  |  |
| 10510          | Invention & Innovation              |  |  |
| 10515          | Technological Systems               |  |  |
| M              | Manufacturing Production Process    |  |  |
|                | Development Pathway                 |  |  |
| Course<br>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               |  |  |
| 10999          | Cooperative Work Experience         |  |  |

| Science, Technology, Engineering &<br>Mathematics<br>Career Cluster |   |
|---|---|
| Course<br>Code  | Description                               |
| 10510   | Invention & Innovation                    |
| 10515   | Technological Systems                     |
|   | Engineering & Technology                  |
|   | Pathway                                   |
| Course<br>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 |
| 10999   | 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.
- \*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

| Agric          | Agriculture, Food & Natural Resources<br>Career Cluster |  |
|----------------|---|--|
| Course<br>Code | Description   |  |
|                |   |  |
|                | Natural Resource Systems<br>Pathway                     |  |
| Course<br>Code | Description   |  |
| 17410          | Exploration of Oil Industry                             |  |
| 17413          | Petroleum Industry Skills                               |  |
| 17950          | T&I Capstone  |  |
| 17999          | Cooperative Work Experience                             |  |

|                | Architecture & Construction         |  |  |
|----------------|-------------------------------------|--|--|
|                | Career Cluster                      |  |  |
| Course<br>Code | Description                         |  |  |
| 37020          | Architecture & Construction Cluster |  |  |
|                | Construction                        |  |  |
|                | Pathway                             |  |  |
| Course<br>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                |  |  |
| 17950          | T&I Capstone                        |  |  |
| 17999          | Cooperative Work Experience         |  |  |

| Architecture & Construction Career Cluster |  |  |  |
|--|--|--|--|
| Course<br>Code                             | Description                                    |  |  |
| 37020                                      | Architecture & Construction Cluster            |  |  |
|  | Design/Pre-Construction<br>Pathway             |  |  |
| Course<br>Code                             | Description                                    |  |  |
| 10511                                      | *PLTW Introduction to Engineering Design (IED) |  |  |
| 17132                                      | Computer Aided Drafting                        |  |  |
| 17130                                      | Drafting Technology I                          |  |  |
| 17131                                      | Drafting Technology II                         |  |  |
| 17105                                      | Foundations of Building Trades                 |  |  |
| 17950                                      | T&I Capstone                                   |  |  |
| 17999                                      | Cooperative Work Experience                    |  |  |

|                | Architecture & Construction<br>Career Cluster |  |  |
|----------------|---|--|--|
| Course<br>Code | Description                                   |  |  |
| 37020          | Architecture & Construction Cluster           |  |  |
|                | Maintenance/Operations                        |  |  |
|                | Pathway                                       |  |  |
| Course<br>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                          |  |  |
| 17115          | Sheet Metal Technology                        |  |  |
| 17950          | T&I Capstone                                  |  |  |
| 17999          | Cooperative Work Experience                   |  |  |

| Arts, AV Technology & Communications Career Cluster |   |
|---|---|
| Course<br>Code                                      | Description                                   |
| 37030   | Arts, A/V Technology & Communications Cluster |
|   | Visual Arts                                   |
|   | Pathway                                       |
| Course<br>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<br>Career Cluster      |                  |  |
|--|------------------|--|
| Course<br>Code                               | Description      |  |
| Restaurants & Food/Beverage Services Pathway |                  |  |
| Course<br>Code                               | Description      |  |
| 17050  | Culinary Arts I  |  |
| 17051  | Culinary Arts II |  |
| 17050  | T&I Capstone     |  |
| 17950  | Total Capatonie  |  |

Transportation, Distribution & Logistics
Career Cluster

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

| Manufacturing<br>Career Cluster |  |  |
|---------------------------------|--|--|
| Course<br>Code                  | Description                                      |  |
| 37140                           | Manufacturing Cluster                            |  |
| Production                      |  |  |
| Pathway                         |  |  |
| Course<br>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                            |  |
| 17950                           | T&I Capstone                                     |  |
| 17999                           | Cooperative Work Experience                      |  |

| Course Code   Description  | Transportation, Distribution & Logistics Career Cluster |  |  |
|--|---|--|--|
| 37170   Transportation, Distribution & Logistics Cluster   |   | Description  |  |
| Pathway           Code         Description           17812         Aviation Technology I           17813         Aviation Technology II           17045         Commercial Driver License           17814         Unmanned Aircraft Systems           17950         T&I Capstone |   | Transportation, Distribution & Logistics Cluster                                 |  |
| Code         Description           17812         Aviation Technology I           17813         Aviation Technology II           17045         Commercial Driver License           17814         Unmanned Aircraft Systems           17950         T&I Capstone                   |   |  |  |
| 17813         Aviation Technology II           17045         Commercial Driver License           17814         Unmanned Aircraft Systems           17950         T&I Capstone  |   | Description  |  |
| 17045         Commercial Driver License           17814         Unmanned Aircraft Systems           17950         T&I Capstone   | 17812   | Aviation Tochnology I  |  |
| 17814 Unmanned Aircraft Systems 17950 T&I Capstone   |   | Aviation reciniology i   |  |
| 17950 T&I Capstone   |   | 0,   |  |
|  | 17813   | Aviation Technology II   |  |
| 17000 Comprehius Work Experience   | 17813<br>17045  | Aviation Technology II<br>Commercial Driver License                              |  |
| 17999 Cooperative Work Experience  | 17813<br>17045<br>17814                                 | Aviation Technology II<br>Commercial Driver License<br>Unmanned Aircraft Systems |  |

- Description Code Transportation, Distribution & Logistics Cluster **Facility & Mobile Equipment Maintenance Pathway** Description Code Auto Collision Tech I 17030 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 Tech 17041 Diesel Technology II 17150 Electronics Technology I 17029 Foundations of Automotive 17035 Parts & Merchandise Management 17311 Recreational Small Engine Technology 17310 Recreational Small Engine Technology I T&I Capstone
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Course

- 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.