



Learning that works
for Nebraska

**NEBRASKA CAREER &
TECHNICAL EDUCATION**

PROGRAMS OF STUDY
2019-2020



2019-2020 Nebraska Career Education Programs of Study

Agriculture, Food, and Natural Resources Career Field

Agriculture, Food, and Natural Resources Cluster

Full Year Course 

Sequence of CTE Courses	Introduction Course	Intermediate Course	Capstone Course
Agribusiness Systems	011000 Intro to Agriculture, Food and Natural Resources -OR- 018060 CASE Introduction to AFNR	011009 Agribusiness	011011 Agricultural Sales and Communications -OR- 011010 Agricultural Economics -OR- 012005 Agribusiness Management and Entrepreneurship
Agribusiness Systems Plus	011000 Intro to Agriculture, Food and Natural Resources -OR- 018060 CASE Introduction to AFNR	011009 Agribusiness -AND- 017000 Agricultural Leadership and Career Readiness	011011 Agricultural Sales and Communications -OR- 011010 Agricultural Economics -OR- 012005 Agribusiness Management and Entrepreneurship
Animal Systems	011000 Intro to Agriculture, Food and Natural Resources -OR- 018060 CASE Introduction to AFNR	011004 Animal Science -OR- 018062 CASE Animal Science	011006 Small Animal Management -OR- 011005 Large Animal Management -OR- 011015 Veterinary Science -OR- 012004 Agriculture Biotechnology -OR- 018063 CASE Biotechnology
Animal Systems Plus	011000 Intro to Agriculture, Food and Natural Resources -OR- 018060 CASE Introduction to AFNR	011004 Animal Science -OR- 018062 CASE Animal Science -AND- 017000 Agricultural Leadership and Career Readiness	011006 Small Animal Management -OR- 011005 Large Animal Management -OR- 011015 Veterinary Science -OR- 012004 Agriculture Biotechnology -OR- 018063 CASE Biotechnology

Environmental and Natural Resources	011000 Intro to Agriculture, Food and Natural Resources -OR- 018060 CASE Introduction to AFNR	 013000 Environmental and Natural Resources -OR-  018064 CASE Natural Resources and Ecology	013001 Wildlife -OR- 013002 Environmental and Natural Resources Management
Environmental and Natural Resources Plus	011000 Intro to Agriculture, Food and Natural Resources -OR- 018060 CASE Introduction to AFNR	 013000 Environmental and Natural Resources -OR-  018064 CASE Natural Resources and Ecology -AND- 017000 Agricultural Leadership and Career Readiness	013001 Wildlife -OR- 013002 Environmental and Natural Resources Management
Food Products and Processing Systems	011000 Intro to Agriculture, Food and Natural Resources -OR- 018060 CASE Introduction to AFNR	 014000 Food Science and Safety -OR-  018065 CASE Food Science and Safety -OR- 018080 FNS Food Production, Nutrition, and Health	014001 Food Products and Technology -OR- 018081 FNS Food Science -OR- 018082 FNS Nutrition Science
Food Products and Processing Systems Plus	011000 Intro to Agriculture, Food and Natural Resources -OR- 018060 CASE Introduction to AFNR	 014000 Food Science and Safety -OR-  018065 CASE Food Science and Safety -OR- 018080 FNS Food Production, Nutrition, and Health -AND- 017000 Agricultural Leadership and Career Readiness	014001 Food Products and Technology -OR- 018081 FNS Food Science -OR- 018082 FNS Nutrition Science
Plant Systems	011000 Intro to Agriculture, Food and Natural Resources -OR- 018060 CASE Introduction to AFNR	 011007 Plant Science -OR-  018061 CASE Plant Science	011008 Crop Management/Agronomy -OR- 012001 Nursery and Landscape -OR- 012002 Floriculture -OR- 012004 Agriculture Biotechnology -OR- 018063 CASE Biotechnology

<p>Plant Systems Plus</p>	<p>011000 Intro to Agriculture, Food and Natural Resources -OR- 018060 CASE Introduction to AFNR</p>	<p>1 011007 Plant Science -OR- 1 018061 CASE Plant Science -AND- 017000 Agricultural Leadership and Career Readiness</p>	<p>011008 Crop Management/Agronomy -OR- 012001 Nursery and Landscape -OR- 012002 Floriculture -OR- 012004 Agriculture Biotechnology -OR- 018063 CASE Biotechnology</p>
<p>Power, Structural and Technical Systems</p>	<p>011000 Intro to Agriculture, Food and Natural Resources -OR- 018060 CASE Introduction to AFNR</p>	<p>1 016004 Welding -OR- 1 016000 Power, Structural, and Technical Foundations -OR- 018066 CASE Agriculture Power and Technology</p>	<p>016005 Metals and Fabrication -OR- 016006 Precision Agriculture and Engineering -OR- 016003 Power, Structural, and Technology Systems</p>
<p>Power, Structural and Technical Systems Plus</p>	<p>011000 Intro to Agriculture, Food and Natural Resources -OR- 018060 CASE Introduction to AFNR</p>	<p>1 016004 Welding -OR- 1 016000 Power, Structural, and Technical Foundations -OR- 018066 CASE Agriculture Power and Technology -AND- 017000 Agricultural Leadership and Career Readiness</p>	<p>016005 Metals and Fabrication -OR- 016006 Precision Agriculture and Engineering -OR- 016003 Power, Structural, and Technology Systems</p>

<p>Diversified Agriculture Systems</p>	<p>011000 Intro to Agriculture, Food and Natural Resources -OR- 018060 CASE Introduction to AFNR</p>	<p>1 011004 Animal Science -OR- 1 018062 CASE Animal Science -AND- 011007 Plant Science -OR- 018061 CASE Plant Science -AND- 011009 Agribusiness -OR- 014000 Food Science and Safety -OR- 018065 CASE Food Science and Safety -OR- 018080 FNS Food Production, Nutrition, and Health -OR- 013000 Environmental and Natural Resources -OR- 018064 CASE Natural Resources and Ecology -OR- 016004 Welding -OR- 016000 Power, Structural, and Technical Foundations -OR- 018066 CASE Agriculture Power and Technology</p>	
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<p>Diversified Agriculture Systems Plus</p>	<p>011000 Intro to Agriculture, Food and Natural Resources -OR- 018060 CASE Introduction to AFNR</p>	<p>1 011004 Animal Science -OR- 1 018062 CASE Animal Science -AND- 011007 Plant Science -OR- 018061 CASE Plant Science -AND- 011009 Agribusiness -OR- 014000 Food Science and Safety -OR- 018065 CASE Food Science and Safety -OR- 018080 FNS Food Production, Nutrition, and Health -OR- 013000 Environmental and Natural Resources -OR- 018064 CASE Natural Resources and Ecology -OR- 016004 Welding -OR- 016000 Power, Structural, and Technical Foundations -OR- 018066 CASE Agriculture Power and Technology -AND- 017000 Agricultural Leadership and Career Readiness</p>	
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2019-2020 Nebraska Career Education Programs of Study

Business, Marketing, and Management Career Field

Business Administration Cluster

Full Year Course 

Sequence of CTE Courses	Introduction Course	Intermediate Course	Capstone Course
Accounting	032300 Introdution to Business -OR- 032400 College Introduction to Business -OR- 033000 Personal Finance -OR- 033002 Wealth Building Fundamentals	030501 Accounting 1	030502 Accounting 2
Advance Accounting	030503 Accounting 3	030504 Accounting 4 -OR- 030302 College Principles of Accounting	320705 Business Mgmt Work-Based Learning Experience 
Entrepreneurship	032300 Introdution to Business -OR- 032400 College Introduction to Business	030501 Accounting 1 -OR- 038100 Marketing -OR- 031800 Economics	032370 Entrepreneurship -OR- 032600 College Introduction to Entrepreneurship
Management	032300 Introdution to Business -OR- 032400 College Introduction to Business	038101 Marketing Management -OR- 032370 Entrepreneurship -OR- 032600 College Introduction to Entrepreneurship -OR- 030900 Business Law	032802 Management and Leadership
Business Technology Communications	270501 IT Applications 1	270502 IT Applications 2	030600 Business Communications
Business Technology Applications	033422 Introduction to Business Technology	270501 IT Applications 1	270502 IT Applications 2

Approved National Models Program of Study (POS)

Full Year Course 

National POS	Introduction Course	Intermediate Course	Capstone Course
NAF Academy of Finance	030803 Financial Services	032400 College Introduction to Business	030802 Insurance - OR- 034100 Business in a Global Economy - OR- 030801 Financial Planning -OR- 032370 Entrepreneurship
High School of Business	032300 Introdution to Business	031800 Economics	038100 Marketing - AND- 033001 Principles of Finance -AND- 032802 Management and Leadership -AND- 031805 Business Strategies

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2019-2020 Nebraska Career Education Programs of Study

Business, Marketing, and Management Career Field

Finance Cluster

Full Year Course 1

Sequence of CTE Courses	Introduction Course	Intermediate Course	Capstone Course
Finance	032300 Introdution to Business -OR- 032400 College Introduction to Business -OR- 033000 Personal Finance -OR- 033002 Wealth Building Fundamentals	030501 Accounting 1	038501 AP Microeconomics -OR- 038503 College Microeconomics -OR- 038500 AP Macroeconomics -OR- 038502 College Macroeconomics -OR- 111700 Statistics/Probability -OR- 031800 Economics

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2019-2020 Nebraska Career Education Programs of Study

Business, Marketing, and Management Career Field

Hospitality and Tourism Cluster

Full Year Course **1**
YEAR

Sequence of CTE Courses	Introduction Course	Intermediate Course	Capstone Course
Culinary Arts	090107 Fundamentals of Food and Nutrition	370021 Culinary Skills 1	370022 Culinary Skills 2 -OR- 320600 Fundamentals of Entrepreneurship - OR- 032370 Entrepreneurship - OR- 032600 College Introduction to Entrepreneurship
ProStart	090107 Fundamentals of Food and Nutrition	370030 ProStart 1	370031 ProStart 2

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2019-2020 Nebraska Career Education Programs of Study

Business, Marketing, and Management Career Field

Marketing Cluster

Full Year Course **1**
YEAR

Sequence of CTE Courses	Introduction Course	Intermediate Course	Capstone Course
Marketing	038100 Marketing	038101 Marketing Management	038201 College Principles of Marketing -OR- 038200 Advanced Marketing
Marketing Entrepreneurship	038100 Marketing	038101 Marketing Management	032370 Entrepreneurship - OR- 032600 College Introduction to Entrepreneurship

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2019-2020 Nebraska Career Education Programs of Study

Communication and Information Systems Career Field

Communication Arts Cluster

Full Year Course **1**
YEAR

Sequence of CTE Courses	Introduction Course	Intermediate Course	Capstone Course
Digital Design	270602 Digital Media	270611 Digital Design	270613 Advanced Digital Design -OR- 270604 Foundations of Web Design
Video Production	270602 Digital Media	270609 Video Production	270610 Media Production -OR- 270604 Foundations of Web Design
Web Design	270602 Digital Media	270604 Foundations of Web Design	270706 Web Design and Development

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2019-2020 Nebraska Career Education Programs of Study

Communication and Information Systems Career Field

Information Technology Cluster

Full Year Course 

Sequence of CTE Courses	Introduction Course	Intermediate Course	Capstone Course
Business Technology	270501 IT Applications 1	270502 IT Applications 2	270504 IT Fundamentals -OR- 270604 Foundations of Web Design -OR- 270611 Digital Design
Data Science	270502 IT Applications 2 -OR- 270703 Computer Science Principles 	270611 Digital Design -OR- 270604 Foundations of Web Design	111700 Statistics/Probability -OR- 111720 AP Statistics
IT Operations Management	270504 IT Fundamentals -OR- 270502 IT Applications 2	270601 Networking	270707 Cybersecurity -OR- 270711 PLTW Cybersecurity 
Web Development	270504 IT Fundamentals -OR- 270502 IT Applications 2	270604 Foundations of Web Design	270706 Web Design and Development
Information Technology	270504 IT Fundamentals -OR- 270602 Digital Media	270704 Foundations of Computing	270703 Computer Science Principles -OR- 270702 AP Computer Science Principles 
Computer Science	270704 Foundations of Computing	270703 Computer Science Principles -OR- 270702 AP Computer Science Principles 	270701 Computer Science A -OR- 270712 IB Computer Science -OR- 270700 AP Computer Science A 
PLTW Computer Science	270710 PLTW Computer Science Essentials 	270708 PLTW Computer Science Principles 	270709 PLTW Computer Science A 

Software Development	270703 Computer Science Principles - OR- 270702 AP Computer Science Principles	270707 Cybersecurity	270701 Computer Science A -OR- 270712 IB Computer Science -OR- 270700 AP Computer Science A -OR- 270705 Software Development
PLTW Software Development	270708 PLTW Computer Science Principles	270711 PLTW Cybersecurity	270709 PLTW Computer Science A
CISCO Networking	270505 CISCO I: Introduction to Networks	270506 CISCO II: Routing and Switching Essentials	270507 CISCO III: Scaling Networks

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2019-2020 Nebraska Career Education Programs of Study

Health Sciences Career Field

Health Sciences Cluster

Sequence of CTE Courses	Introduction Course	Intermediate Course	Capstone Course
Health Sciences	077300 Health Sciences 1	077301 Health Sciences 2	077302 Health Sciences 3
Health Informatics	077300 Health Sciences 1	077301 Health Sciences 2 -OR- 077600 Medical Terminology	077800 Health Information Technology -OR- 077812 Health Information Management and Ethics
Biotechnology Research	077300 Health Sciences 1	077600 Medical Terminology -OR- 130210 Anatomy and Physiology	012004 Agriculture Biotechnology -OR- 077304 Exploring the Clinical Lab
Therapeutic Certificated Services	077300 Health Sciences 1	077301 Health Sciences 2 -OR- 077600 Medical Terminology	077400 Certificated Nursing Assistant -OR- 077402 Emergency Medical Technician/Cert -OR- 077444 Pharmacy Technician -OR- 077401 Medication Aide -OR- 077446 Phlebotomy Technician
Behavioral Health	077300 Health Sciences 1	077301 Health Sciences 2	077801 Behavioral Health 1 -AND- 077802 Behavioral Health 2
Life Span Performance	077300 Health Sciences 1	130210 Anatomy and Physiology -OR- 077600 Medical Terminology	077500 Introduction to Sports Medicine -OR- 077702 Human Life Cycle Nutrition -OR- 077601 Exercise Science -OR- 077701 Performance Nutrition

Allied/Public Health	077300 Health Sciences 1	077301 Health Sciences 2	077900 Allied Health and Medicine -OR- 077303 Personal and Community Medical Issues/Public Health
PLTW Principles of Biomedical Science			077803 PLTW Principles of Biomedical Science 1 -AND- 077804 PLTW Principles of Biomedical Science 2
PLTW Human Body Systems			077805 PLTW Human Body Systems 1 -AND- 077806 PLTW Human Body Systems 2
PLTW Medical Interventions			077807 PLTW Medical Interventions 1 -AND- 077808 PLTW Medical Interventions 2
PLTW Biomedical Innovation			077809 PLTW Biomedical Innovation 1 -AND- 077810 PLTW Biomedical Innovation 2

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2019-2020 Nebraska Career Education Programs of Study

Human Sciences and Education Career Field

Education and Training Cluster

Sequence of CTE Courses	Introduction Course	Intermediate Course	Capstone Course
Education and Training	350001 Introduction to Education and Training -AND- 090123 Human Growth and Development	350002 Best Practices in Education and Training	350010 Field Experience in Education and Training

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2019-2020 Nebraska Career Education Programs of Study

Human Sciences and Education Career Field

Human Services Cluster

Sequence of CTE Courses	Introduction Course	Intermediate Course	Capstone Course
Child, Youth, and Family Studies	090123 Human Growth and Development -OR- 090101 Introduction to Human Science/FACS	090119 Child Development -OR- 090117 Parents and Families	090116 Interpersonal Relationships -OR- 320711 Human Services/FACS Work-Based Learning -OR- 090104 Life and Career Readiness
Early Childhood Education and Services	090119 Child Development	090121 Early Childhood Education and Services	090122 Early Childhood Practicum
Nutrition and Wellness	090107 Fundamentals of Food and Nutrition	090124 Nutrition	090125 Dietetics
Food Science	090107 Fundamentals of Food and Nutrition	090113 Food Science	320600 Fundamentals of Entrepreneurship -OR- 032370 Entrepreneurship -OR- 032600 College Introduction to Entrepreneurship
Design	090126 Intro to Design Principles	090103 Textile Construction -OR- 090109 Housing and Interior Design -OR- 090206 Fashion Design	320600 Fundamentals of Entrepreneurship -OR- 032370 Entrepreneurship -OR- 032600 College Introduction to Entrepreneurship -OR- 090207 Business of Textiles
Counseling and Mental Health	090101 Introduction to Human Science/FACS	090128 Careers in Mental Health -OR- 090127 Families in Crisis	151200 Psychology -OR- 151210 AP Psychology -OR- 151300 Sociology

FNS: Nutrition and Food Science Certified	090107 Fundamentals of Food and Nutrition	090129 FNS Food Production, Nutrition and Health	090130 FNS Food Science -OR- 018082 FNS Nutrition Science
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2019-2020 Nebraska Career Education Programs of Study

Human Sciences and Education Career Field

Law, Public Safety Corrections and Security Cluster

Sequence of CTE Courses	Introduction Course	Intermediate Course	Capstone Course
Correction Services	390010 Foundations of Law, Public Safety, Corrections, and Security	390015 Introduction to Criminal Justice	390025 Courts and Judicial Process
Law Enforcement Services	390010 Foundations of Law, Public Safety, Corrections, and Security	390015 Introduction to Criminal Justice	390026 Police and Society
Emergency and Fire Management	390010 Foundations of Law, Public Safety, Corrections, and Security	390015 Introduction to Criminal Justice	077402 Emergency Medical Technician/Cert

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2019-2020 Nebraska Career Education Programs of Study

Skilled and Technical Sciences Career Field

Architecture and Construction Cluster

Full Year Course **1**
YEAR

Sequence of CTE Courses	Introduction Course	Intermediate Course	Capstone Course
Architectural Design	100100 Introduction to Skilled and Technical Sciences -OR- 090109 Housing and Interior Design	100140 Architectural Design 1	100141 Architectural Design 2
Construction	100100 Introduction to Skilled and Technical Sciences -OR- 100405 Electricity	100110 Construction Trades 1 -OR- 016002 Structural Systems	100120 Construction Trades 2

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2019-2020 Nebraska Career Education Programs of Study

Skilled and Technical Sciences Career Field

Energy and Engineering Cluster

Full Year Course 

Sequence of CTE Courses	Introduction Course	Intermediate Course	Capstone Course
Project Lead The Way (PLTW)	100160 PLTW Principles of Engineering -OR-  100161 PLTW Introduction to Engineering Design 	100164 PLTW Aerospace Engineering -OR-  100162 PLTW Civil Engineering and Architecture -OR-  101901 PLTW Computer Integrated Manufacturing -OR-  100403 PLTW Digital Electronics 	100163 PLTW Engineering Design and Development 
Engineering	103191 Engineering Design and Systems Thinking -OR- 100100 Introduction to Skilled and Technical Sciences	103192 Engineering Problem Solving -OR- 103194 Robotics	103193 Systems Engineering and Project Management -OR- 103195 Advanced Robotics
Energy	100406 Fundamentals of Energy	100408 Sustainable Energy	100407 Physics and Mathematics of Energy

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2019-2020 Nebraska Career Education Programs of Study

Skilled and Technical Sciences Career Field

Manufacturing Cluster

Full Year Course 1

Sequence of CTE Courses	Introduction Course	Intermediate Course	Capstone Course
Manufacturing	100100 Introduction to Skilled and Technical Sciences -OR- 101920 Manufacturing Processes – Woods -OR- 101400 Manufacturing Processes – Metals -OR- 101950 Manufacturing Processes – Plastics -OR- 100140 Architectural Design 1	101920 Manufacturing Processes – Woods -OR- 101400 Manufacturing Processes – Metals -OR- 101950 Manufacturing Processes – Plastics -OR- 100401 Introduction to Electronics	101921 Manufacturing Production - Woods -OR- 101922 Advanced Manufacturing and Fabrication - Woods -OR- 101401 Manufacturing Production - Metals -OR- 101402 Advanced Manufacturing and Fabrication - Metals -OR- 101951 Manufacturing Production - Plastics -OR- 101952 Advanced Manufacturing and Fabrication - Plastics -OR- 100402 Advanced Electronics -OR- 101900 Introduction to Mechatronics
Welding	100100 Introduction to Skilled and Technical Sciences -OR- 101930 Welding 1 - OR- 100140 Architectural Design 1	101930 Welding 1 - OR- 101940 Welding 2 - OR- 016004 Welding	101940 Welding 2 - OR- 101941 Welding 3 - OR- 016005 Metals and Fabrication

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2019-2020 Nebraska Career Education Programs of Study

Skilled and Technical Sciences Career Field

Transportation, Distribution and Logistics Cluster

Full Year Course **1**
YEAR

Sequence of CTE Courses	Introduction Course	Intermediate Course	Capstone Course
TDL - Technician	101600 Transportation 1 - OR- 100100 Introduction to Skilled and Technical Sciences -OR- 016003 Power, Structural, and Technology Systems	101620 Transportation 2	101630 Transportation 3 - OR- 101640 Collision Repair
TDL - Supply Chain	101601 Introduction to TDL	101610 Distribution and Logistics	101650 Business Logistics

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