

GLOBAL COMPETITIVENESS

STUDENT SUCCESS

ENTREPRENEURSHIP  
COLLEGE & CAREER  
LEADERSHIP  
ECONOMIC VITALITY  
RATES

HIGHER GRADUATION  
HIGH-DEMAND  
RIGOR  
SKILLED  
SUSTAINABLE  
WORKFORCE

WORLD CLASS

LEADERSHIP  
GLOBAL  
COMPETITIVENESS  
RELEVANCE

ECONOMIC VITALITY  
STUDENT SUCCESS  
HIGHER GRADUATION  
RATES

LEADERSHIP  
TECHNICAL KNOWLEDGE  
CAREER PREPARATION  
HIGHER OPPORTUNITY  
ECONOMIC DEVELOPMENT

OPPORTUNITY  
COLLEGE & CAREER  
RIGOR  
SUSTAINABLE  
SKILLED  
WORKFORCE

ECONOMIC DEVELOPMENT  
TECHNICAL KNOWLEDGE  
LEARNING  
INNOVATION  
CAREER PREPARATION  
LEARNING KNOWLEDGE

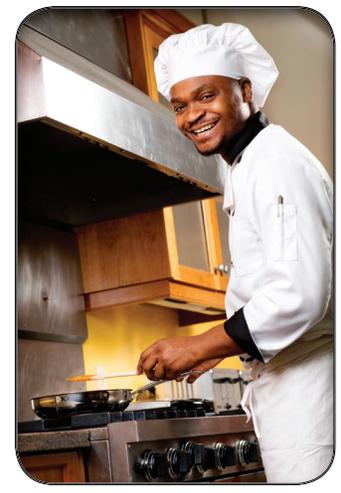
STUDENT SUCCESS  
HIGHER GRADUATION  
RATES

LEADERSHIP  
GLOBAL  
COMPETITIVENESS  
RELEVANCE



Learning that works for Nebraska

**CTE**<sup>TM</sup>



Nebraska's Career Education System

Programs of Study



LEADERSHIP

TECHNICAL KNOWLEDGE

CAREER PREPARATION

HIGHER GRADUATION RATES  
OPPORTUNITY INNOVATION RELEVANCE  
ECONOMIC DEVELOPMENT

OPPORTUNITY

COLLEGE & CAREER

CAREER READINESS  
INNOVATION  
ECONOMIC VITALITY

RELEVANCE

SUSTAINABLE

SKILLED

WORKFORCE

ECONOMIC DEVELOPMENT

VITALITY WORLD CLASS LEADING CHANGE ECONOMIC DEVELOPMENT LEADERSHIP  
TECHNICAL KNOWLEDGE  
LEARNING INNOVATION

CAREER

PREPARATION  
LEARNING KNOWLEDGE



# Nebraska Career Education Staff

[www.education.ne.gov/nce](http://www.education.ne.gov/nce)

## Nebraska Career Education Administration

**Richard Katt** (402.471.4808)  
Director of Career Education  
[rich.katt@nebraska.gov](mailto:rich.katt@nebraska.gov)

**Cory Epler** (402.471.2494)  
Deputy Director of Career Education  
[cory.epler@nebraska.gov](mailto:cory.epler@nebraska.gov)

## Nebraska Career Education Career Field Leaders

**Tony Glenn** (402.471.4819)  
Skilled and Technical Sciences  
Career Field Specialist  
[tony.glenn@nebraska.gov](mailto:tony.glenn@nebraska.gov)

**Matt Kreifels** (402.472.2815)  
Agriculture, Food and Natural  
Resources Field Specialist  
[mattkreifels@unl.edu](mailto:mattkreifels@unl.edu)

**Beverly Newton** (402.471.4865)  
Communication & Information  
Systems Career Field Specialist  
[bev.newton@nebraska.gov](mailto:bev.newton@nebraska.gov)

**Carol Ringenberg** (402.471.1843)  
Health Sciences and Human Services  
& Education Career Field Specialist  
[carol.ringenberg@nebraska.gov](mailto:carol.ringenberg@nebraska.gov)

**Bonnie Sibert** (402.471.4818)  
Business, Marketing & Management  
Career Field Specialist  
[bonnie.sibert@nebraska.gov](mailto:bonnie.sibert@nebraska.gov)

## Nebraska Career Education Student Leadership Specialists

**Jan Brandt** (402.471.4814)  
State FCCLA Advisor  
[janis.brandt@nebraska.gov](mailto:janis.brandt@nebraska.gov)

**Nicole Coffey** (402.471.4803)  
State DECA Advisor  
[nicole.coffey@nebraska.gov](mailto:nicole.coffey@nebraska.gov)

**Donelle Johnson** (402.471.2441)  
State FFA Executive Director  
[donelle.johnson@nebraska.gov](mailto:donelle.johnson@nebraska.gov)

**Beverly Newton** (402.471.4865)  
State FBLA Advisor  
[bev.newton@nebraska.gov](mailto:bev.newton@nebraska.gov)

**Carol Ringenberg** (402.471.1843)  
State FEA Advisor  
State HOSA Contact  
[carol.ringenberg@nebraska.gov](mailto:carol.ringenberg@nebraska.gov)

**Greg Stahr** (402.471.0898)  
State SkillsUSA Advisor  
[greg.stahr@nebraska.gov](mailto:greg.stahr@nebraska.gov)

## Nebraska Career Education Cross Field Specialists

**Gregg Christensen** (402.471.4337)  
Entrepreneurship and Career  
Education Specialist  
High Schools That Work/  
Making Middle Grades Work  
State Coordinator  
[gregg.christensen@nebraska.gov](mailto:gregg.christensen@nebraska.gov)

**Matt Hastings** (402.471.3104)  
Data + Research Specialist  
[matt.hastings@nebraska.gov](mailto:matt.hastings@nebraska.gov)

**Donna Hoffman** (402.471.4811)  
School Counseling Specialist  
[donna.vrbka@nebraska.gov](mailto:donna.vrbka@nebraska.gov)

**Greg Stahr** (402.471.0898)  
Work-Based Learning Coordinator  
[greg.stahr@nebraska.gov](mailto:greg.stahr@nebraska.gov)

# Nebraska Career Education Standards Revision Process

## The 3R's of Nebraska Career Education Standards Revision



1. Right Content
2. Right Rigor
3. Right Sequence

Visioning Session	Standards Development	Standards Review Panels
<ul style="list-style-type: none"> <li>Secondary Instructors</li> <li>Postsecondary Instructors (2- &amp; 4-year)</li> <li>Business and Industry</li> </ul>	<ul style="list-style-type: none"> <li>Secondary Instructors</li> <li>Postsecondary Instructors (2- &amp; 4-year)</li> </ul>	<ul style="list-style-type: none"> <li>Academic Standards Experts</li> <li>Business and Industry</li> <li>Stakeholders</li> </ul>
<p style="text-align: center;"><b>Outcomes</b></p> <p>Determine appropriate programs of study in each career field for Nebraska schools</p> <p>Develop partnerships between secondary and postsecondary education in each career field</p>	<p style="text-align: center;"><b>Outcomes</b></p> <p>Develop an appropriate sequence of courses for each program of study in the career field</p> <p>Identify standards, benchmarks and performance indicators for each course in the program of study</p>	<p style="text-align: center;"><b>Outcomes</b></p> <p>Crosswalk to Nebraska academic standards, common core standards and CTE national knowledge and skill statements</p> <p>Validate standards with industry expectations and requirements</p>





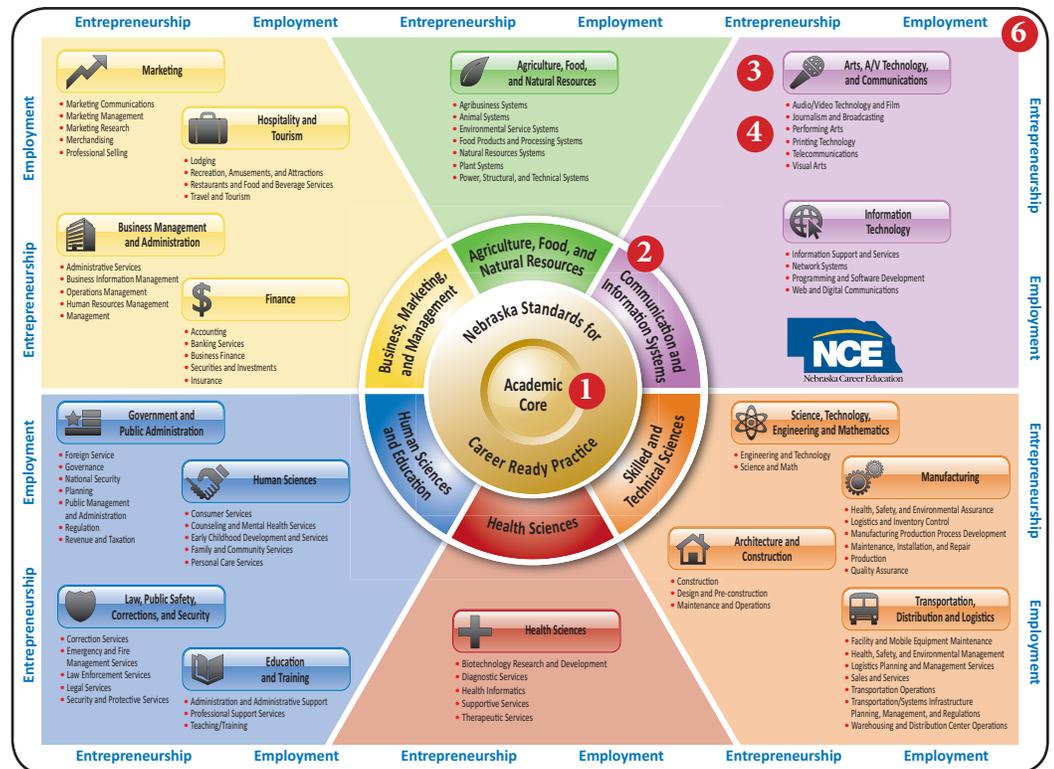
# Understanding the Nebraska Career Education Model

The core of Nebraska Career Education is the NCE model; a visual map of “career fields” and “career clusters/pathways.” The model organizes the 16 National Career Clusters into six broad sectors of entrepreneurship/employment:

- Agriculture, Food and Natural Resources
- Business, Marketing and Management
- Communication and Information Systems
- Health Sciences
- Human Services and Education
- Skilled and Technical Sciences

These fields break down into more specific Career Clusters, Pathways and Occupational Specialties. The model provides a way for:

- Students to explore the diversity of career options available to them
- Students to begin their preparation for their career choice with appropriate education plans for secondary and postsecondary education
- Schools to organize curriculum into programs of study that prepare students for opportunities in Nebraska’s economy



## {1} Academic Core/College and Career Readiness

At the center of the NCE Model is the expectation for all students to develop a solid academic core. The next ring identifies specific college and career readiness standards and practices that prepare students for success in postsecondary education as well as entrepreneurship/employment.

## {2} Career Fields

The six career fields represent broad sectors of the job market on which students may choose to focus.

## {3} Career Clusters

Each career field is composed of career clusters radiating out from it. The clusters are more specific segments of the job market. Each cluster is comprised of groups of careers that focus on similar subjects or call for similar skills. Collectively, the clusters provide a framework for understanding the entire world of work. A basic understanding and exploration of each of the clusters will provide students with a solid foundation for career decision-making to conceptualize the entire world of work.

## {4} Career Pathways

Listed below each cluster, career pathways (indicated with red bullets) further define the specific types of career opportunities within the cluster. Each career pathway within a cluster requires mastery of a more specific set of knowledge and skills related to that pathway.

## {5} Career Specialties (not shown)

Career Specialties (not shown on the model) are the specific occupation/job titles within a cluster and pathway. As the career development process becomes more specific and defined within a chosen cluster, awareness of the current employment opportunities helps students pick a specific career pathway. With changes in technology, the labor market, and international economy, new job titles will be created while others decline or disappear.

## {6} Employability and Entrepreneurship

Career education provides the opportunity to gain the knowledge and skills for both employment AND entrepreneurship. The reality for Nebraska and the United States is that entrepreneurship, not just working in a job for others, will determine our economic growth and vitality. Career technical education classes can infuse entrepreneurship competencies into curricula, enhancing financial literacy and tapping into students' talents, interests and creativity. By infusing entrepreneurship competencies, career education is helping to create the next generation of America's innovators and entrepreneurs. These same competencies can also enhance the productivity of the workforce as they are applied to creative problem-solving.





## Programs of Study

The Federal Carl D. Perkins Career and Technical Education Act of 2006 (Perkins IV) requires eligible recipients of Perkins Funds to have at least one approved program of study in career education.

A program of study includes the CTE, core, and other required/supportive courses that prepare a student for their career area. It should also identify extended learning opportunities such as career student organizations, work-based learning, and other school and community activities.

In addition to qualifying for Perkins funds, Nebraska Career Education has identified the following advantages of identifying programs of study:

- Create logical sequences of CTE courses.
- Promote alignment between secondary and postsecondary education.
- Promote options for postsecondary education.
- Promote advancement of dual credit courses.
- Provide rigorous and relevant curriculum.
- Provide a tool for career guidance to help students prepare their Personal Learning Plan.

The United States Department of Education has defined the following components of an effective Program of Study

### 1. Legislation and Policies

Legislation or administrative policies promote POS development and implementation. Effective legislation and policies should:

- Provide funding, professional development, and dedicated staff time for POS development and sustainability.
- Ensure opportunities for any secondary student to participate in a POS.
- Require secondary students to develop an individual learning plans.

### 2. Partnerships

Ongoing relationships among education, business, and other community stakeholders are central to POS success. Collaborative partnerships should:

- Conduct analyses of economic and workforce trends to identify statewide (or regional) POS to be created, expanded, or discontinued.
- Link into existing initiatives that promote workforce and economic development.
- Identify, validate, and keep current the technical and career readiness skills that should be taught within a POS.

### 3. Professional Development

Sustained, intensive, and focused opportunities for administrators, teachers, and faculty foster POS design, implementation, and maintenance. Effective professional development should:

- Support the alignment of curriculum from grade to grade and from secondary to postsecondary education (vertical curriculum alignment).
- Support the development of integrated academic and CTE curriculum and instruction (horizontal curriculum alignment).
- Ensure that teachers have the content knowledge to align and integrate curriculum and instruction.

#### 4. Accountability and Evaluation Systems

Systems and strategies to gather quantitative and qualitative data on both POS components and student outcomes are crucial for ongoing efforts to develop and implement POS.

Well-designed accountability and evaluation systems should:

- Yield valid and reliable data on key student outcomes (indicators) referenced in Perkins and other relevant federal and state legislation.
- Provide timely data to evaluate and improve the effectiveness of POS.

#### 5. Nebraska Standards for Career Ready Practice

Content standards that define what students are expected to know and be able to do to enter and advance in college and/or their careers comprise the foundation of a POS. Rigorous career ready practice standards should:

- Be continually validated in collaboration with secondary, postsecondary, and industry partners.
- Incorporate Nebraska career readiness and core/CTE standards, which students must master regardless of their chosen career area or POS.
- Provide the same rigorous knowledge and skills in English and mathematics that employers and colleges expect of high school graduates.
- Incorporate industry-recognized technical standards that are valued in the workplace.

#### 6. Course Sequences

Non-duplicative sequences of secondary and postsecondary courses within a POS ensure that students transition to postsecondary education without duplicating classes or requiring remedial coursework. Well-developed course sequences should:

- Map out the recommended academic and CTE courses in each POS.
- Begin with introductory courses at the secondary level that teach broad foundational knowledge and skills and progress to more occupational-specific courses at the postsecondary level.
- Offer opportunities for students to earn postsecondary credit for coursework taken during high school.





## 7. Credit Transfer Agreements

Credit transfer agreements provide opportunities for secondary students to be awarded transcribed postsecondary credit, supported with formal agreements among secondary and postsecondary education systems. Well developed agreements:

- Provide a systematic, seamless process for students to earn college credit for postsecondary courses taken in high school, transfer credit to any two- and four-year institution in the state that offers the POS, and transfer credit earned at a two-year college to any other two- or four-year institution in the state that offers the POS.
- College credit should be automatically transcribed at the college for high school students.
- Describe the expectations and requirements for, at a minimum, teacher and faculty qualifications, course prerequisites, postsecondary entry requirements, location of courses, tuition reimbursement, and credit transfer process.

## 8. Career Counseling and Academic Advisement

Career counseling and academic advisement help students to make informed decisions about which POS to pursue. Comprehensive career counseling and academic advisement systems:

- Are based on state and/or local counseling standards.
- Ensure that counseling professionals have access to up-to-date information about POS offerings.
- Offer information to help students learn about postsecondary education and career options, including prerequisites for particular POS.
- Offer resources for students to identify their career interests and aptitudes and to select appropriate POS.
- Provide information and resources for parents to help their children prepare for college and careers, including workshops on college and financial aid applications.

## 9. Teaching and Learning Strategies

Innovative and creative instructional approaches enable teachers to integrate academic and technical instruction and students to apply academic and technical learning in their POS coursework. Effective teaching and learning strategies should:

- Be jointly led by interdisciplinary teaching teams of academic and CTE teachers or faculty.
- Employ contextualized work-based, project-based, and problem-based learning approaches.
- Incorporate team-building, critical thinking, problem-solving, and communication skills, such as through the use of career student organization (CSO) activities.

## 10. Technicals Skills Assessments

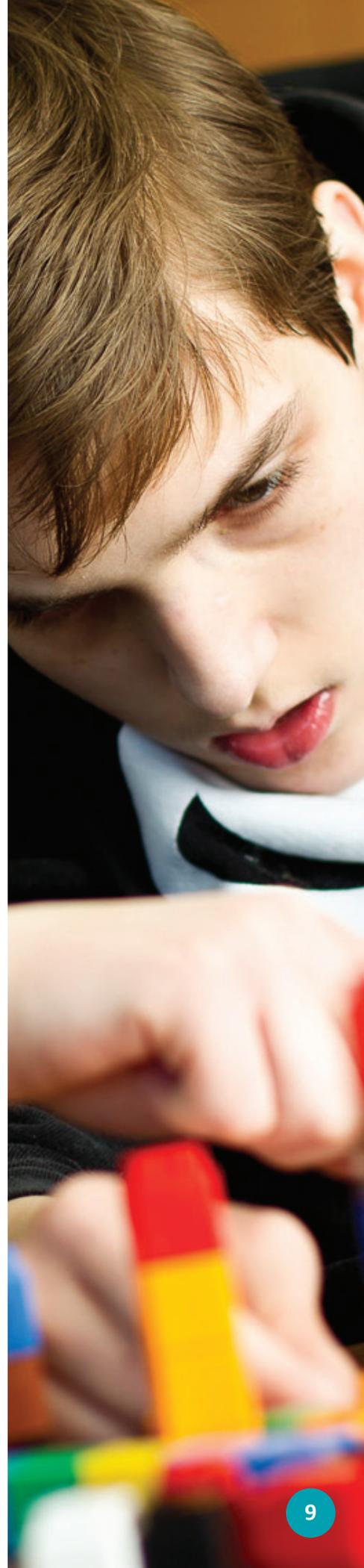
National, state, and/or local assessments provide ongoing information on the extent to which students are attaining the necessary knowledge and skills for entry into and advancement in postsecondary education and careers in their chosen POS. Well-developed technical skills assessments:

- Measure student attainment of technical skill proficiencies at multiple points during a POS.
- Employ industry-approved technical skill assessments based on industry standards, where available and appropriate.
- Incorporate performance-based assessment items, to the greatest extent possible, where students must demonstrate the application of their knowledge and skills.

### Sample Program of Study: Health Science

Program of Study: Health Science I							Sample
Cluster: Health Science							
Level	Grade	English/ Language Arts	Math	Science	Social Studies	CTE Sequence of Courses within Program of Study	Requirements and Electives
Middle School	7	English 7	Math 7	Science 7	Social Studies 7	NCE C4C Curriculum for Careers Keyboarding Applications Computer Applications	World Languages & Cultures Physical Education Health Education Exploration of Entrepreneurship
	8	English 8	Math 8	Science 8	Social Studies 8		
Secondary	9	English/ Language Arts I	Algebra I	Biology	Geography	Introduction to Health Sciences Health Science II Medical Terminology  <i>Other Capstone Courses:</i> Emergency Medical Technician - Basic (EMT-B) Nursing Assistant Certification (CNA) Medication Aid Personal and Community Health Issues Advanced Health Sciences Health Information Technology	World Languages & Cultures Physical Education Health Education Information Technology Applications I Entrepreneurship Human Development Nutrition & Food Safety and First Aid/CPR Strength Training
	10	English/ Language Arts II	Geometry	Chemistry	World History		
	11	English/ Language Arts III	Algebra II	Physics	American History		
	12	English/ Language Arts IV	Intro to Statis- tics/Discrete/ Finite Math Pre-Calc	Anatomy or Physiology	American Govt. Economics		
Postsecondary	Visit Nebraska Career Connections for postsecondary options. Postsecondary institutions that offer this Program of Study:						
	Central Community College	Metro Community College	Mid-Plains Community College	Northeast Community College	Southeast Community College	Western Community College	

Work-Based Learning	School Activities	Community Activities
Job shadow professionals Participate in internships Secure part-time employment Volunteer in this career area	Athletics SkillsUSA FCCLA HOSA Medical Explorers Science Club Service Learning Wellness Club	Take First Aid Courses Health Science camps Volunteer with Red Cross Certified CPR classes EMT certification NE Safety Patrol-Mock Disasters





# Sequences of CTE Courses

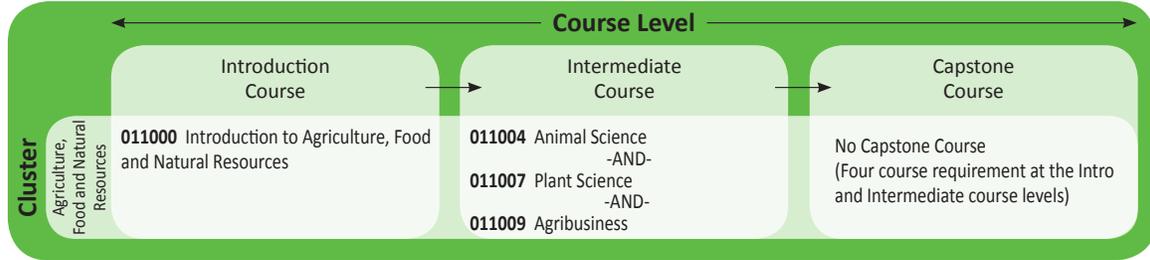
## Approved State Model Programs of Study



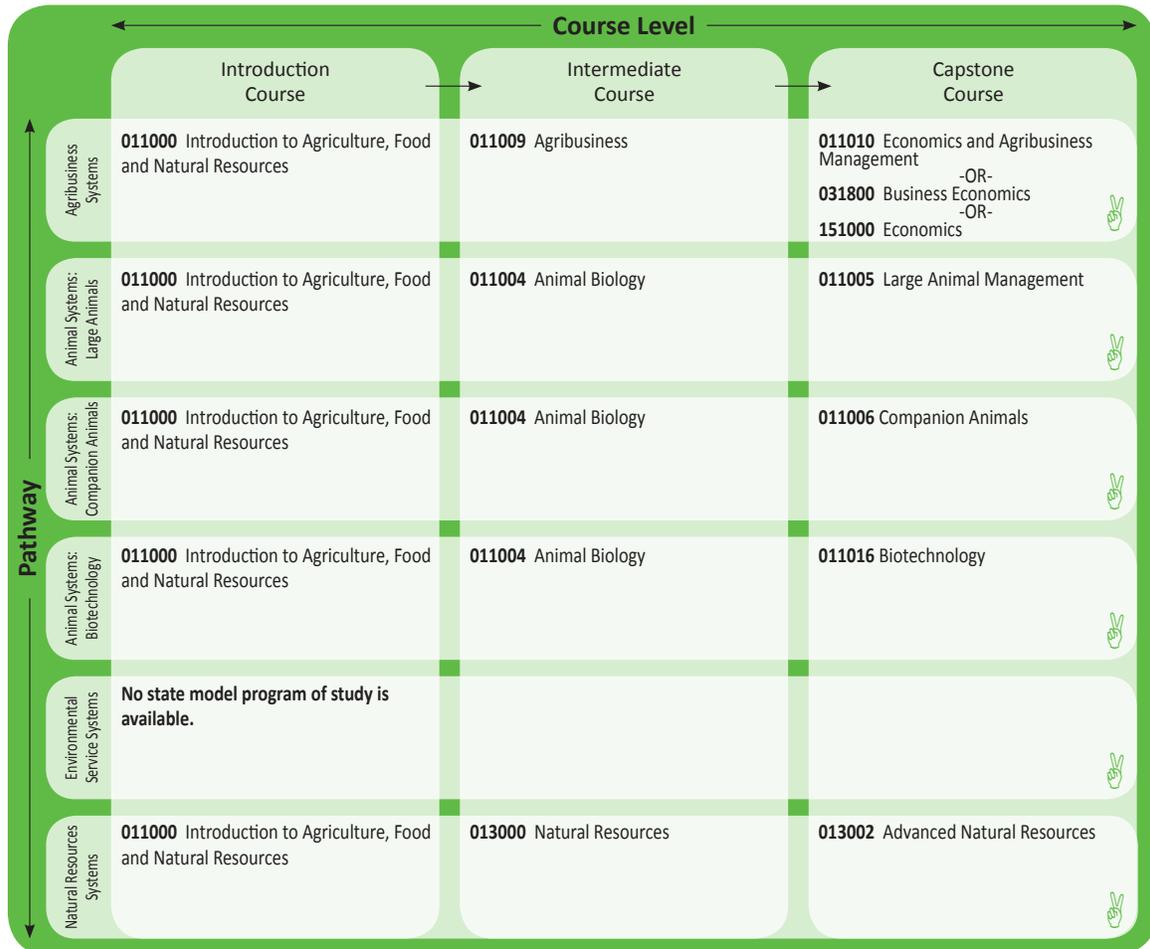
### Agriculture, Food and Natural Resources

#### Cluster Level

Dual Credit



#### Pathway Level



**Matt Kreifels**  
 Agriculture, Food and Natural Resources  
 Career Field Specialist

402-471-2451  
 mattkreifels@unl.edu  
 www.neaged.org



# Sequences of CTE Courses

## Approved State Model Programs of Study

### Pathway Level (cont.)

Dual Credit

Pathway	Course Level		
	Introduction Course	Intermediate Course	Capstone Course
Plant Systems: Plant Science Biotech	<b>011000</b> Introduction to Agriculture, Food and Natural Resources	<b>011007</b> Plant Science	<b>012004</b> Biotechnology
Plant Systems: Plant Science Agron	<b>011000</b> Introduction to Agriculture, Food and Natural Resources	<b>011007</b> Plant Science	<b>011008</b> Agronomic Science
Plant Systems: Plant Science Biology	<b>011000</b> Introduction to Agriculture, Food and Natural Resources	<b>011007</b> Plant Science	<b>011016</b> Plant Biology
Plant Systems: Horticulture Nursery	<b>011000</b> Introduction to Agriculture, Food and Natural Resources	<b>012000</b> Horticulture	<b>012001</b> Nursery and Landscape
Plant Systems: Horticulture Floriculture	<b>011000</b> Introduction to Agriculture, Food and Natural Resources	<b>012000</b> Horticulture	<b>012002</b> Floriculture
Power, Structural, and Technical Systems: Power and Tech	<b>011000</b> Introduction to Agriculture, Food and Natural Resources	<b>016000</b> Power, Structure and Technical Systems Fundamentals	<b>016003</b> Power and Technology
Power, Structural, and Technical Systems: Structure Systems	<b>011000</b> Introduction to Agriculture, Food and Natural Resources	<b>016000</b> Power, Structure and Technical Systems Fundamentals	<b>016002</b> Structural Systems
Power, Structural, and Technical Systems: Metals & Fab	<b>011000</b> Introduction to Agriculture, Food and Natural Resources	<b>016000</b> Power, Structure and Technical Systems Fundamentals	<b>016005</b> Metals and Fabrication
Food Products and Processing Systems	No state model program of study is available.		
Food & Nutritional Science	XXXXXX Food, Nutrition and Health	XXXXXX Food Science -OR- XXXXXX Nutritional Science	XXXXXX Food and Nutritional Science Research and Development



# Sequences of CTE Courses

## Approved State Model Programs of Study



### Business Management and Administration

#### Cluster Level

Dual Credit Full Year Course

Cluster	Course Level		
	Introduction Course	Intermediate Course	Capstone Course
BMA C Accounting	<b>032300</b> Introduction to Business, Marketing and Management	<b>032802</b> Management and Leadership	<b>030300</b> Accounting -OR- <b>030301</b> Advanced Accounting -OR- <b>030302</b> College Principles of Accounting
BMA C Law	<b>032300</b> Introduction to Business, Marketing and Management	<b>030300</b> Accounting	<b>030900</b> Business Law
BMA C Management	<b>032300</b> Introduction to Business, Marketing and Management	<b>032802</b> Management and Leadership	<b>320600</b> Entrepreneurship -OR- <b>XXXXXX</b> College Introduction to Entrepreneurship
BMA C Entrepreneurship	<b>032300</b> Introduction to Business, Marketing and Management	<b>030300</b> Accounting	<b>320600</b> Entrepreneurship -OR- <b>XXXXXX</b> College Introduction to Entrepreneurship
BMA C Academy	<b>032400</b> College Introduction to Business	<i>Note: A Program of Study must include a minimum of three semesters.</i>	<b>030302</b> College Principles of Accounting -OR- <b>XXXXXX</b> College Introduction to Entrepreneurship

#### Pathway Level

Pathway	Course Level		
	Introduction Course	Intermediate Course	Capstone Course
BMA P Accounting	<b>032802</b> Management and Leadership	<b>320600</b> Entrepreneurship	<b>030300</b> Accounting -OR- <b>032400</b> College Introduction to Business -OR- <b>030302</b> College Principles of Accounting
BMA P Academy	<b>032802</b> Management and Leadership	<b>030300</b> Accounting	<b>032400</b> College Introduction to Business



**Bonnie Sibert**  
Business, Marketing and Management  
Career Field Specialist

402-471-4818  
bonnie.sibert@nebraska.gov  
www.education.ne.gov/BMIT

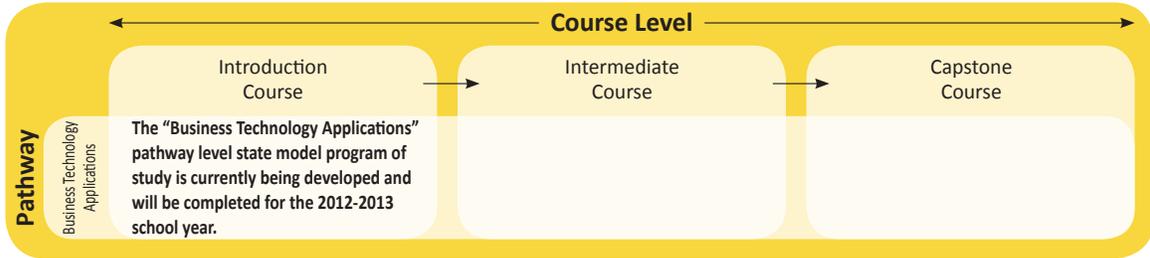


# Sequences of CTE Courses

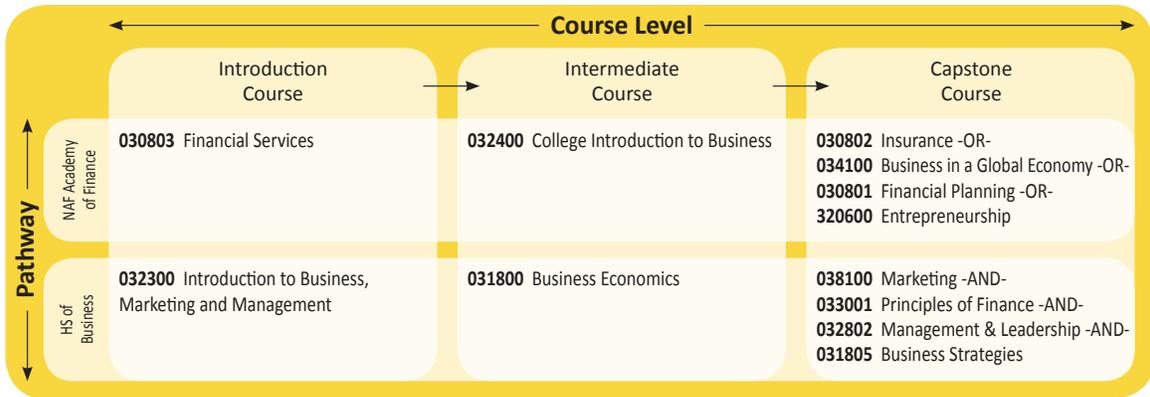
## Approved State Model Programs of Study

Dual Credit  
 Full Year Course

### Pathway Level



### Approved National Models





# Sequences of CTE Courses

## Approved State Model Programs of Study



### Finance

Cluster Level

Dual Credit Full Year Course

Cluster	Course Level		
	Introduction Course	Intermediate Course	Capstone Course
FIN C Financial Management	030300 Accounting		030302 College Principles of Accounting -OR- 030301 Advanced Accounting -OR- 033002 College Wealth Building and Financial Management
FIN C Accounting	033000 Personal Finance		030300 Accounting -OR- 030302 College Principles of Accounting
FIN C Academy	033002 College Wealth Building and Financial Management		030302 College Principles of Accounting
FIN C Business Economics	031800 Business Economics		030300 Accounting -OR- 030302 College Principles of Accounting
FIN C Economics	151000 Economics (Social Studies)		030300 Accounting -OR- 030302 College Principles of Accounting



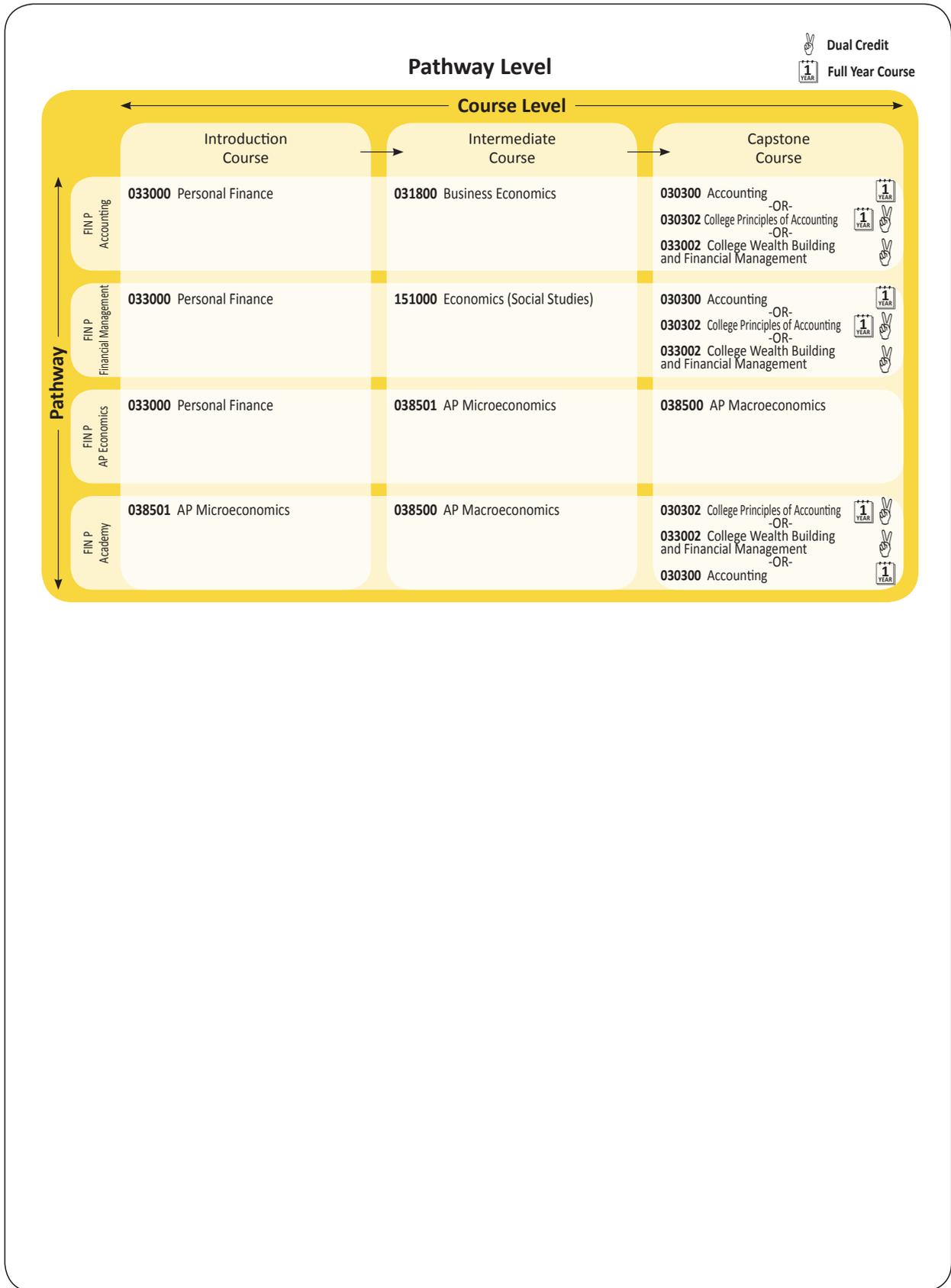
**Bonnie Sibert**  
Business, Marketing and Management  
Career Field Specialist

402-471-4818  
bonnie.sibert@nebraska.gov  
www.education.ne.gov/BMIT



# Sequences of CTE Courses

## Approved State Model Programs of Study





# Sequences of CTE Courses

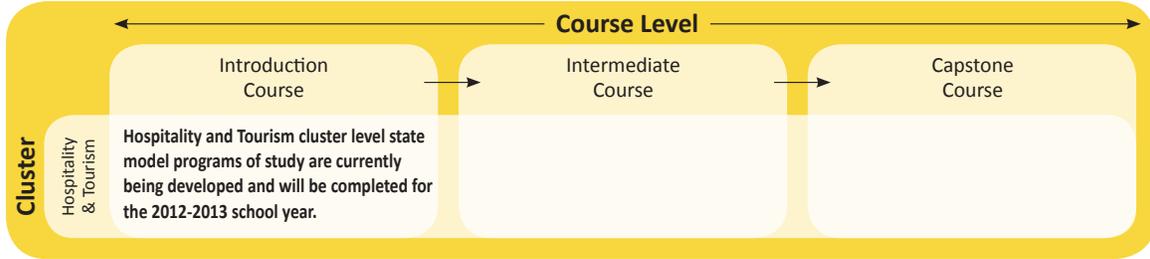
## Approved State Model Programs of Study



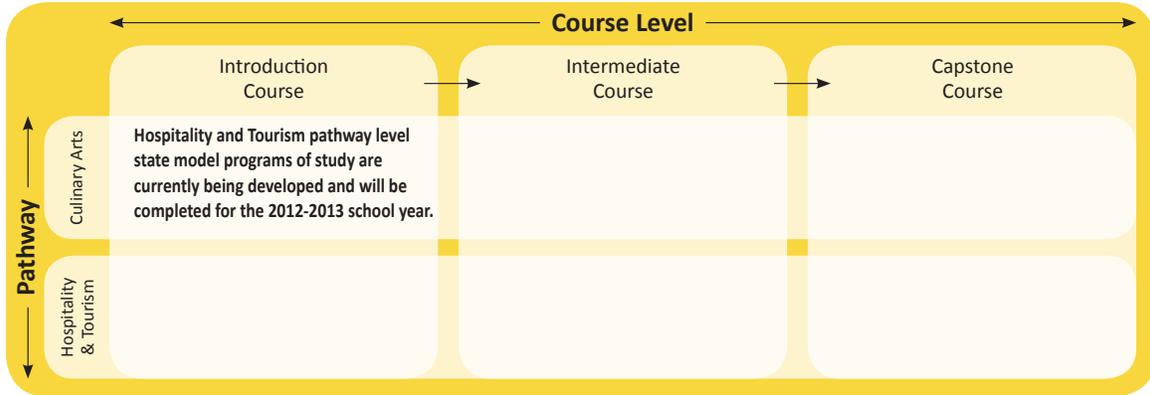
### Hospitality and Tourism

#### Cluster Level

Dual Credit Full Year Course



#### Pathway Level



**Bonnie Sibert**  
Business, Marketing and Management  
Career Field Specialist

402-471-4818  
bonnie.sibert@nebraska.gov  
www.education.ne.gov/BMIT



# Sequences of CTE Courses

## Approved State Model Programs of Study



### Marketing

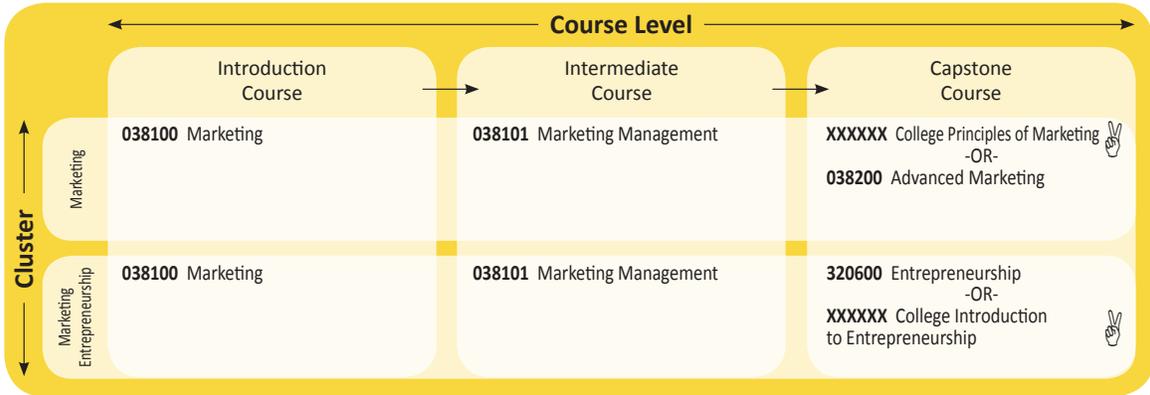
Cluster Level



Dual Credit

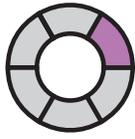


Full Year Course



**Bonnie Sibert**  
Business, Marketing and Management  
Career Field Specialist

402-471-4818  
bonnie.sibert@nebraska.gov  
www.education.ne.gov/BMIT



# Sequences of CTE Courses

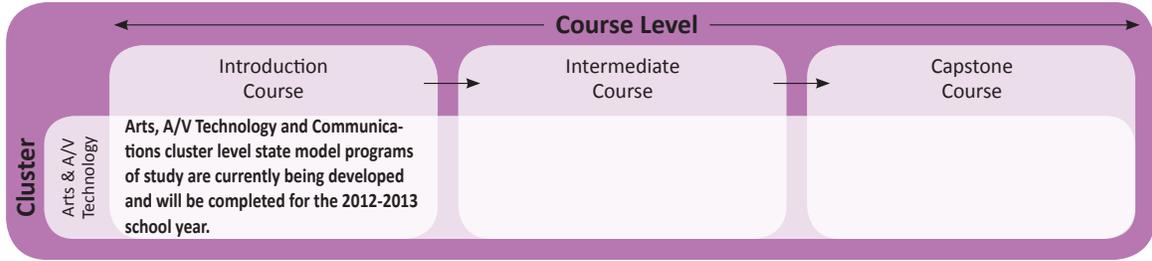
## Approved State Model Programs of Study



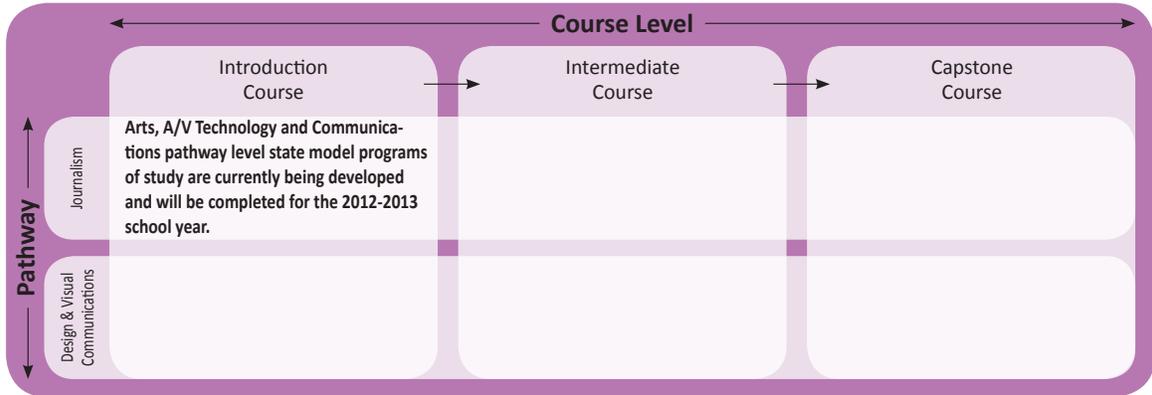
### Arts, A/V Technology and Communications

#### Cluster Level

Dual Credit

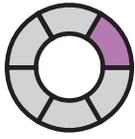


#### Pathway Level



**Beverly Newton**  
Communication and Information Systems  
Career Field Specialist

402-471-4865  
bev.newton@nebraska.gov  
www.education.ne.gov/BMIT



# Sequences of CTE Courses

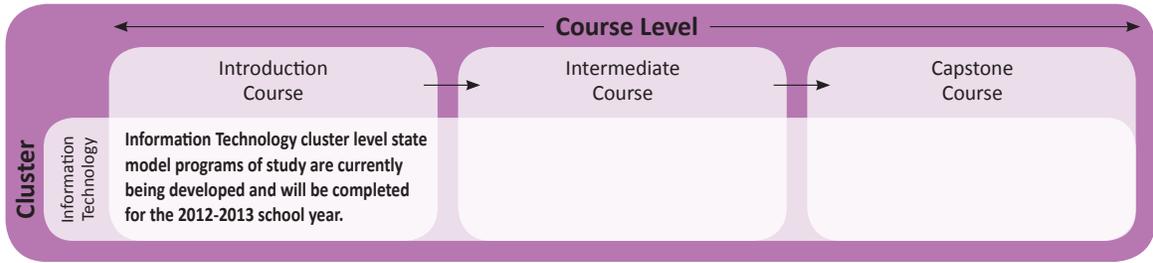
## Approved State Model Programs of Study



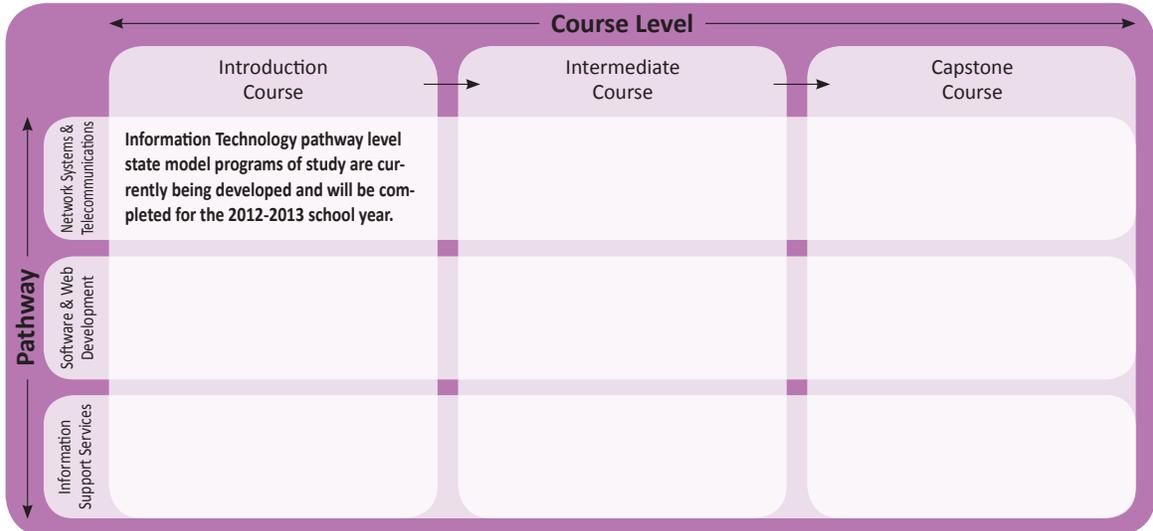
### Information Technology

#### Cluster Level

Dual Credit



#### Pathway Level



**Beverly Newton**  
Communication and Information Systems  
Career Field Specialist

402-471-4865  
bev.newton@nebraska.gov  
www.education.ne.gov/BMIT



# Sequences of CTE Courses

## Approved State Model Programs of Study



### Health Sciences

#### Cluster Level

Dual Credit

Cluster	Course Level		
	Introduction Course	Intermediate Course	Capstone Course
Health Sciences I	077300 Introduction to Health Sciences	077301 Health Science II	077600 Medical Terminology
Health Sciences II	077300 Introduction to Health Sciences	077301 Health Science II	077402 Emergency Medical Technician - Basic (EMT-B)
Health Sciences III	077300 Introduction to Health Sciences	077301 Health Science II	077400 Nursing Assistant Certification (CNA)
Health Sciences IV	077300 Introduction to Health Sciences	077301 Health Science II	077401 Medication Aid
Health Sciences V	077300 Introduction to Health Sciences	077301 Health Science II	077303 Personal and Community Health Issues
Health Sciences VI	077300 Introduction to Health Sciences	077301 Health Science II	077302 Advanced Health Sciences
Health Sciences VII	077300 Introduction to Health Sciences	077301 Health Science II	077800 Health Information Technology
Health Sciences VIII	077300 Introduction to Health Sciences	077304 Exploring Clinical Lab	012004 Biotechnology

#### Pathway Level

No state model program of study is available at the pathway level.



**Carol Ringenberg**  
Health Sciences and Human Services  
and Education Career Field Specialist

402-471-4813  
carol.ringenberg@nebraska.gov  
www.education.ne.gov/HSE



# Sequences of CTE Courses

## Approved State Model Programs of Study



### Education and Training

Cluster Level

Dual Credit

Cluster	Course Level		
	Introduction Course	Intermediate Course	Capstone Course
Education and Training I	090102 Human Development	090119 Early Childhood Education I	090120 Early Childhood Education II
Education and Training II	090102 Human Development	090300 Introduction to Education and Training	090310 Teaching and Training

Pathway Level

No state model program of study is available at the pathway level.



**Carol Ringenberg**  
Health Sciences and Human Services  
and Education Career Field Specialist

402-471-4813  
carol.ringenberg@nebraska.gov  
www.education.ne.gov/HSE



# Sequences of CTE Courses

## Approved State Model Programs of Study



### Government and Public Administration

.....

No state model program of study is available at the cluster or pathway level.



**Carol Ringenberg**  
Health Sciences and Human Services  
and Education Career Field Specialist

402-471-4813  
[carol.ringenberg@nebraska.gov](mailto:carol.ringenberg@nebraska.gov)  
[www.education.ne.gov/HSE](http://www.education.ne.gov/HSE)



# Sequences of CTE Courses

## Approved State Model Programs of Study



### Human Sciences

Cluster Level

Dual Credit

Cluster	Course Level		
	Introduction Course	Intermediate Course	Capstone Course
Human Services I	XXXXXX Intro to Human Service and Education	XXXXXX Human Relations -OR- XXXXXX Life and Career Essentials	XXXXXX Human Growth and Development
Human Services II	XXXXXX Intro to Human Service and Education	XXXXXX Relationship Literacy -OR- XXXXXX Intro to Psychology -OR- XXXXXX Family Relationships	XXXXXX Human Growth and Development

Pathway Level

No state model program of study is available at the pathway level.



**Carol Ringenberg**  
Health Sciences and Human Services  
and Education Career Field Specialist

402-471-4813  
carol.ringenberg@nebraska.gov  
www.education.ne.gov/HSE





# Sequences of CTE Courses

## Approved State Model Programs of Study



### Law, Public Safety, Corrections and Security

Cluster Level

Dual Credit

Cluster	Course Level		
	Introduction Course	Intermediate Course	Capstone Course
Correction Services	000000 Foundations of Law, Public Safety, Corrections and Security	090410 Introduction to Criminal Justice	000000 Courts and Judicial Process
Law Enforcement Services	000000 Foundations of Law, Public Safety, Corrections and Security	090410 Introduction to Criminal Justice	000000 Law Enforcement: Police and Society
Emergency and Fire Management	000000 Foundations of Law, Public Safety, Corrections and Security	090410 Introduction to Criminal Justice	000000 Corrections: Introduction to Corrections
Services Legal Services	000000 Foundations of Law, Public Safety, Corrections and Security	090410 Introduction to Criminal Justice	000000 Security and Loss Prevention
	000000 Foundations of Law, Public Safety, Corrections and Security <i>This is a shared program of study for two career clusters – Law, Public Safety, Corrections and Security and Health Sciences.</i>	090500 EMT I	000000 EMT II <i>(Students must be 18 to take certification test)</i>
	000000 Foundations of Health Science <i>This is a shared program of study for two career clusters – Law, Public Safety, Corrections and Security and Health Sciences.</i>	090500 EMT I	000000 EMT II <i>(Students must be 18 to take certification test)</i>

Pathway Level

No state model program of study is available at the pathway level.



**Carol Ringenberg**  
Health Sciences and Human Services  
and Education Career Field Specialist

402-471-4813  
carol.ringenberg@nebraska.gov  
www.education.ne.gov/HSE





# Sequences of CTE Courses

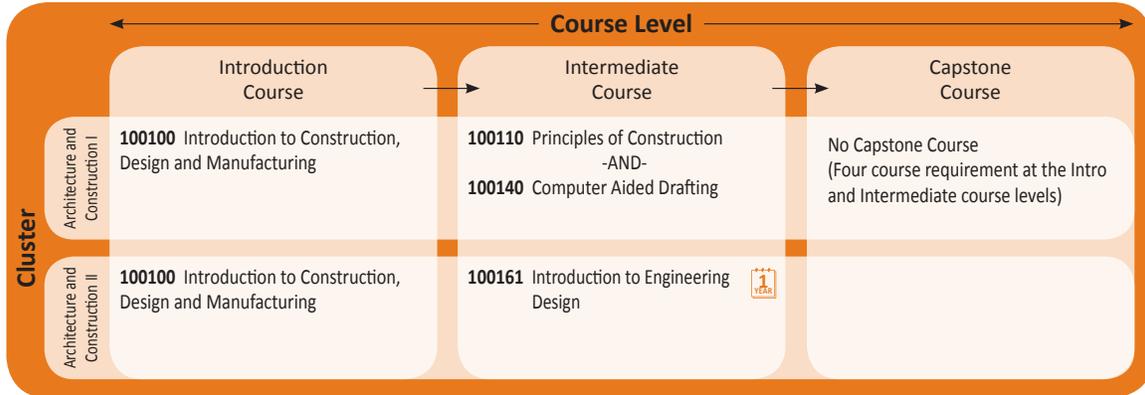
## Approved State Model Programs of Study



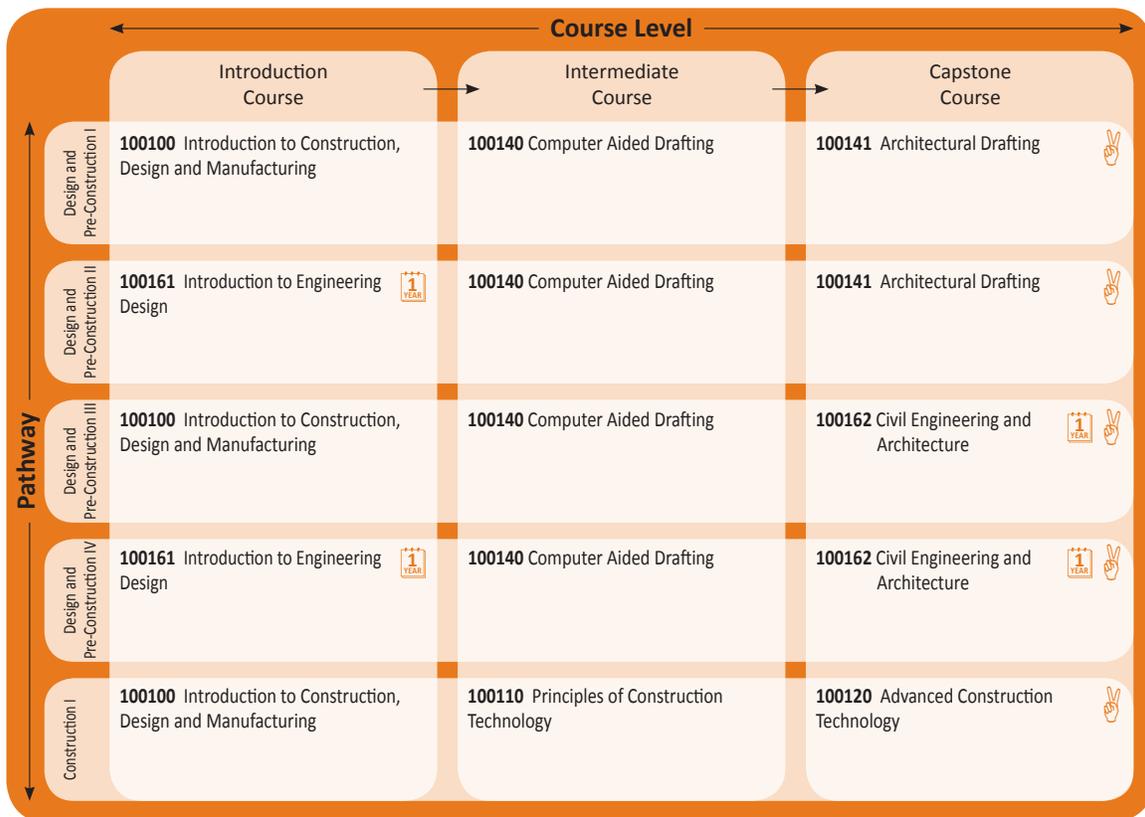
### Architecture and Construction

#### Cluster Level

Dual Credit Full Year Course



#### Pathway Level



**Tony Glenn**  
Skilled and Technical Sciences  
Career Field Specialist

402-471-4819  
tony.glenn@nebraska.gov  
www.education.ne.gov/STS



# Sequences of CTE Courses

## Approved State Model Programs of Study

### Pathway Level (cont.)

Dual Credit Full Year Course

Pathway	Course Level		
	Introduction Course	Intermediate Course	Capstone Course
Construction II	<b>100161</b> Introduction to Engineering Design	<b>100110</b> Principles of Construction Technology	<b>100120</b> Advanced Construction Technology
Construction III	<b>100100</b> Introduction to Construction, Design and Manufacturing	<b>100405</b> Electricity - Comprehensive	<b>100120</b> Advanced Construction Technology
Construction IV	<b>100161</b> Introduction to Engineering Design	<b>100405</b> Electricity - Comprehensive	<b>100120</b> Advanced Construction Technology
Maintenance and Operation I	<b>100100</b> Introduction to Construction, Design and Manufacturing	<b>100800</b> Principles of Maintenance and Operations	<b>100120</b> Advanced Construction Technology
Maintenance and Operation II	<b>100161</b> Introduction to Engineering Design	<b>100800</b> Principles of Maintenance and Operations	<b>100120</b> Advanced Construction Technology



# Sequences of CTE Courses

## Approved State Model Programs of Study



### Manufacturing

#### Cluster Level

Dual Credit Full Year Course

Cluster	Course Level		
	Introduction Course	Intermediate Course	Capstone Course
Manufacturing I	<b>100100</b> Introduction to Construction, Design and Manufacturing	<b>101920</b> Manufacturing -AND- <b>100140</b> Computer Aided Drafting	
Manufacturing II	<b>100100</b> Introduction to Construction, Design and Manufacturing	<b>101920</b> Manufacturing -AND- <b>100162</b> Civil Engineering and Architecture	
Manufacturing III	<b>100100</b> Introduction to Construction, Design and Manufacturing	<b>101920</b> Manufacturing -AND- <b>100110</b> Principles of Construction Technology	
Manufacturing IV	<b>100161</b> Introduction to Engineering Design	<b>101920</b> Manufacturing -AND- <b>100140</b> Computer Aided Drafting	
Manufacturing V	<b>100161</b> Introduction to Engineering Design	<b>101920</b> Manufacturing -AND- <b>100162</b> Civil Engineering and Architecture	
Manufacturing VI	<b>100161</b> Introduction to Engineering Design	<b>101920</b> Manufacturing -AND- <b>00110</b> Principles of Construction Technology	



# Sequences of CTE Courses

## Approved State Model Programs of Study

		Pathway Level		
		Course Level		
		Introduction Course	Intermediate Course	Capstone Course
Pathway	Production I	<b>100100</b> Introduction to Construction, Design and Manufacturing	<b>101920</b> Manufacturing	<b>101921</b> Advanced Fabrication and Manufacturing
	Production II	<b>100161</b> Introduction to Engineering Design	<b>101920</b> Manufacturing	<b>101921</b> Advanced Fabrication and Manufacturing
	Manufacturing Production Process Development I	<b>101900</b> Introduction to Manufacturing/ Mechatronics	<b>101920</b> Manufacturing	<b>101910</b> Advanced Mechatronics
	Manufacturing Production Process Development II	<b>100161</b> Introduction to Engineering Design	<b>101920</b> Manufacturing	<b>101910</b> Advanced Mechatronics
	Manufacturing Production Process Development III	<b>101900</b> Introduction to Manufacturing/ Mechatronics	<b>101901</b> Computer Integrated Manufacturing	<b>101910</b> Advanced Mechatronics
	Manufacturing Production Process Development IV	<b>100161</b> Introduction to Engineering Design	<b>101901</b> Computer Integrated Manufacturing	<b>101910</b> Advanced Mechatronics
	Health, Safety, and Environmental Assurance	No state model program of study is available.		
	Quality Assurance	No state model program of study is available.		



# Sequences of CTE Courses

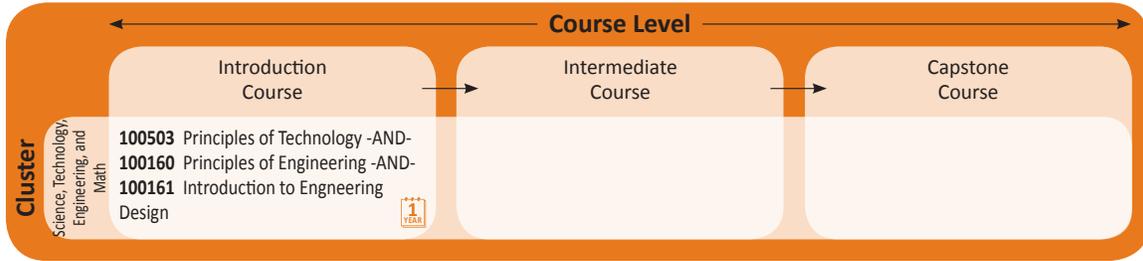
## Approved State Model Programs of Study



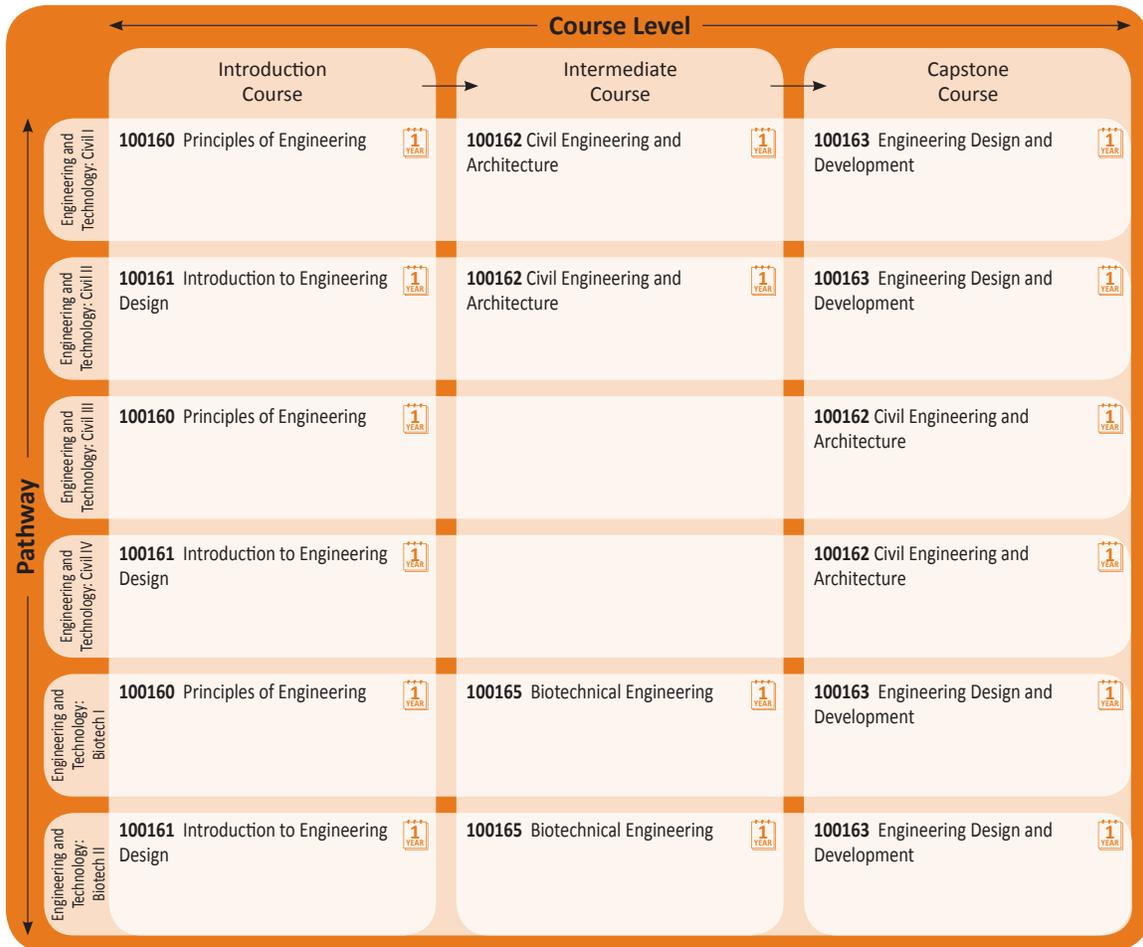
### Science, Technology, Engineering, and Mathematics

#### Cluster Level

Dual Credit Full Year Course



#### Pathway Level



**Tony Glenn**  
Skilled and Technical Sciences  
Career Field Specialist

402-471-4819  
tony.glenn@nebraska.gov  
www.education.ne.gov/STS



# Sequences of CTE Courses

## Approved State Model Programs of Study

### Pathway Level (cont.)

Dual Credit

Pathway	Course Level		
	Introduction Course	Intermediate Course	Capstone Course
Engineering and Technology: Biotech III	100160 Principles of Engineering		100165 Biotechnical Engineering
Engineering and Technology: Biotech IV	100161 Introduction to Engineering Design		100165 Biotechnical Engineering
Engineering and Technology: Computer I	100160 Principles of Engineering	101901 Computer Integrated Manufacturing	100163 Engineering Design and Development
Engineering and Technology: Computer II	100161 Introduction to Engineering Design	101901 Computer Integrated Manufacturing	100163 Engineering Design and Development
Engineering and Technology: Computer III	100160 Principles of Engineering		101901 Computer Integrated Manufacturing
Engineering and Technology: Computer IV	100161 Introduction to Engineering Design		101901 Computer Integrated Manufacturing
Engineering and Technology: Electronics I	100160 Principles of Engineering		101403 Electronics - Digital
Engineering and Technology: Electronics II	100161 Introduction to Engineering Design		101403 Electronics - Digital
Engineering and Technology: Design I	100160 Principles of Engineering		100163 Engineering Design and Development
Engineering and Technology: Design II	100161 Introduction to Engineering Design		100163 Engineering Design and Development



# Sequences of CTE Courses

## Approved State Model Programs of Study

### Pathway Level (cont.)

Dual Credit

Pathway	Course Level		
	Introduction Course	Intermediate Course	Capstone Course
Engineering and Technology: Aerospace I	100160 Principles of Engineering	100164 Aerospace Engineering	100163 Engineering Design and Development
Engineering and Technology: Aerospace II	100161 Introduction to Engineering Design	100164 Aerospace Engineering	100163 Engineering Design and Development
Engineering and Technology: Aerospace III	100160 Principles of Engineering		100164 Aerospace Engineering
Engineering and Technology: Aerospace IV	100161 Introduction to Engineering Design		100164 Aerospace Engineering
Energy I	100160 Principles of Engineering	100406 Energy Exploration	100407 Energy Generation and Distribution
Energy II	100161 Introduction to Engineering Design	100406 Energy Exploration	100407 Energy Generation and Distribution
Energy III	100406 Energy Exploration	100408 Green Energy	100407 Energy Generation and Distribution
Science and Math	No state model program of study is available.		



# Sequences of CTE Courses

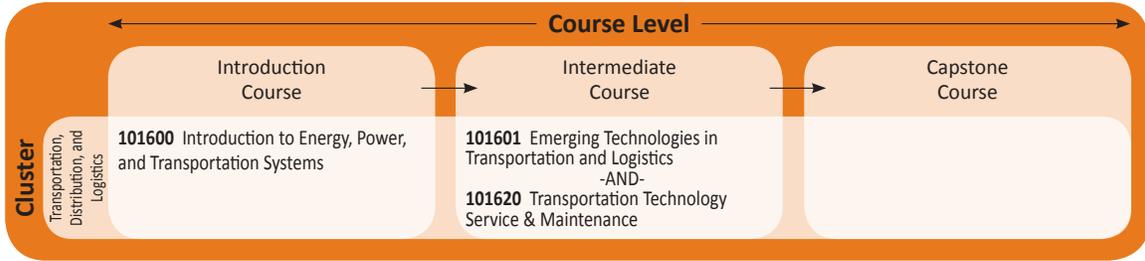
## Approved State Model Programs of Study



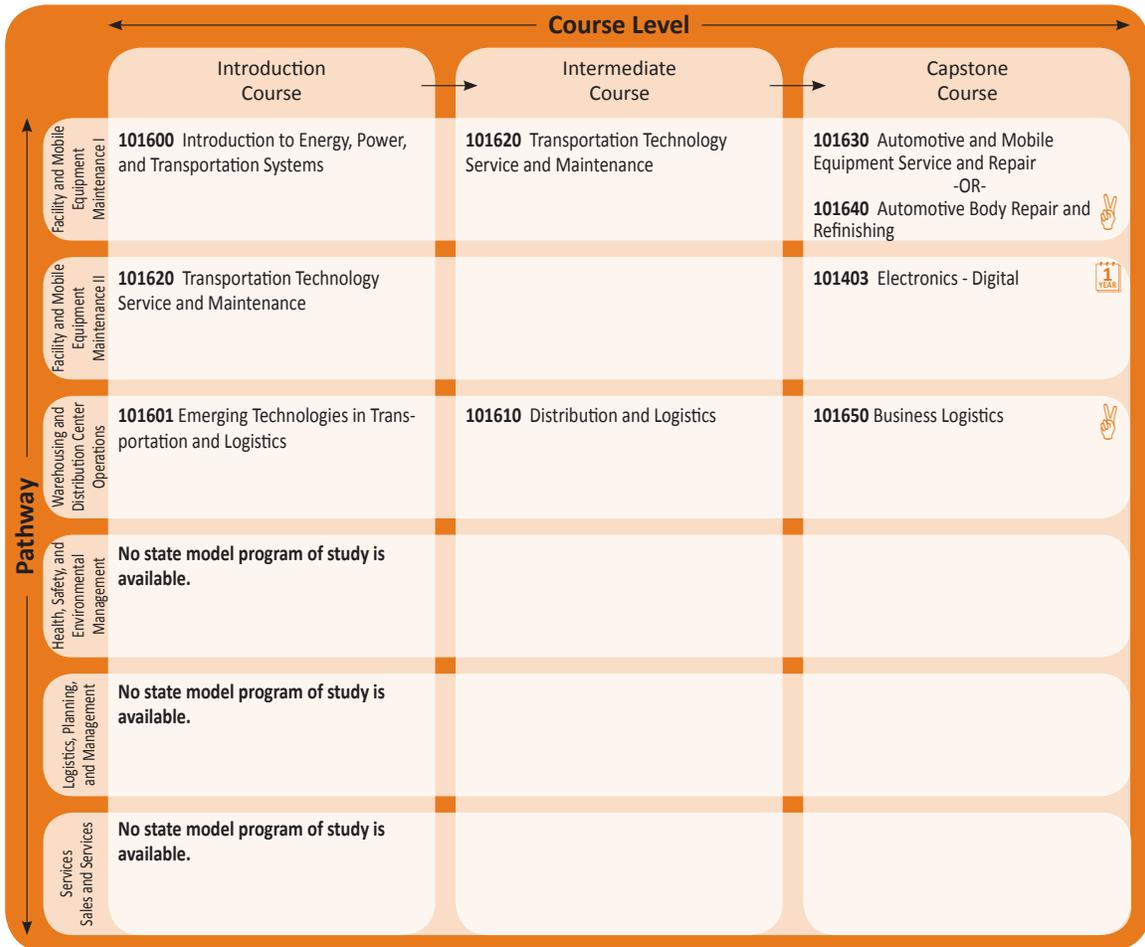
### Transportation, Distribution, and Logistics

#### Cluster Level

Dual Credit Full Year Course



#### Pathway Level



**Tony Glenn**  
Skilled and Technical Sciences  
Career Field Specialist

402-471-4819  
tony.glenn@nebraska.gov  
www.education.ne.gov/STS

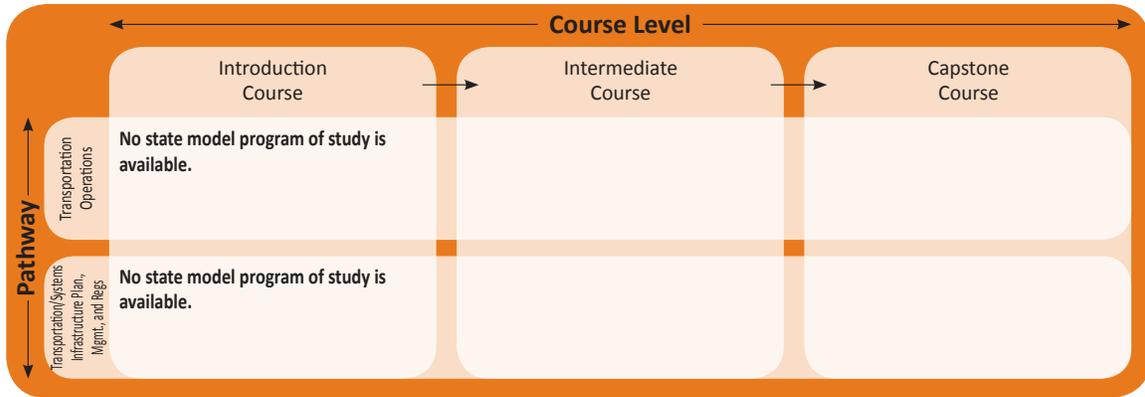


# Sequences of CTE Courses

## Approved State Model Programs of Study

### Pathway Level (cont.)

 Dual Credit  Full Year Course









**NEBRASKA**  
*DEPARTMENT OF*  
**EDUCATION**

[www.education.ne.gov/nce](http://www.education.ne.gov/nce)