Statewide Model Programs of Study

Agriculture, Food, and Natural Resources

January 25, 2022
Thank you for joining!
We will get started shortly.
Agenda

- Welcome from ICCB and EdSystems
- Background on Model POS Guides
  - Policy Alignment
  - Role of Advisory Committee
- Model POS Mapping Process
- Review of POS Guide for Agriculture, Food, and Natural Resources
- POS in Action: Richland Community College
- Feedback and Next Steps

Quick Notes

- We highly encourage you to use the Q&A and Chat Box
- This webinar is being recorded
- The slide deck link will be shared in the chat
Welcome from Illinois Community College Board

Janelle Washington
Director for CTE
EdSystems Staff

Jon Furr
Executive Director

Juan Jose Gonzalez
Pathways Director

Meagan Mitchell
Pathways Manager

Emily Rusca
State Policy & Strategy Director
The EdSystems Mission
Shape and strengthen education and workforce systems to advance racial equity and prepare more young people for productive careers and lives in a global economy.

College & Career Pathways
Bridges to Postsecondary
Data Impact & Leadership
Background on Model Programs of Study
The primary purposes and goals for the Model Programs of Study Guides are to:

- Provide guidance and exemplars for local programs to adopt or customize as they develop programs of study for approval as part of the Perkins V Plan.

- Identify priority dual credit and early college courses that are foundational to the industry area and well-situated for statewide scaling and articulation.

- Define the competencies that should be sequenced across a program of study course sequence to prepare students for the future of work in that industry area.

- Identify entry points for employers to support coursework and related experiences.
Why Develop Statewide Model Programs of Study? Pt. 2

Intended audiences:

- High school faculty working in pathways
- Community College faculty and staff (e.g. academic deans & department heads, early college liaisons, etc.)
- Education for Employment System Directors

Subsequent Presentations

- February 8: Information Technology
- February 22: Architecture, Construction, and Energy
- March 15: Finance and Business Services
- April 19: Arts and Communications
State Pathways Model

Individualized Planning
Career Focused Instruction
Work-Based Learning
Core Academics

Secondary Pathway
Internships/CDE
Low-Skilled Jobs
Semi-Skilled Jobs
Middle-Skilled Jobs
Advanced-Skilled Jobs

Postsecondary Pathway
Pathway Endorsement

OUTCOMES:
Credential Attainment
&
Labor Market / Economic Development

Stackable Credentials
AA/AAS
BA/BS

State Pathways Model
INDIVIDUAL PLAN

Each student completing an endorsement must have an individualized plan, which includes college planning linked to early understanding of career goals, financial aid, resume, and personal statement.

PROFESSIONAL LEARNING

Awareness, exploration, and preparation activities that provide opportunities for students to interact with adults in their workplace

- At least 2 career exploration activities or 1 intensive experience
- 60 cumulative hours of paid or credit supervised career development experience with a professional skills assessment
- At least 2 team-based challenges with adult mentoring

Through these experiences, a student gains essential employability and technical competencies in their identified sector.

CAREER-FOCUSED INSTRUCTIONAL SEQUENCE

Two years of secondary coursework, or equivalent competencies, that articulate to a postsecondary credential with labor market value. Must include at least 6 hours of early college credit.

- Orientation / Introduction
- Skill Development
- Capstone / Advanced Courses

ACADEMIC READINESS

Ready for non-remedial coursework in reading and math by high school graduation through criteria defined by district and local community college.
State Pathways Policy Framework: College, Career and Life Ready

Accelerated Towards a Career Area
- Multiple years of coursework, increasing commitment to the field
- Emphasis on Early college coursework in “Career-focused” subjects
- Courses go Beyond Traditional High School CTE and Industry Credentials, include Complementary General Education Courses

Foundational Skills for All Careers
- General employability and entrepreneurial skills embedded in HS experience
- Student have a familiarity with work-based setting and robust experience in problem-based learning

Academically Ready for College
- Required success in College-Level, career-focused coursework and electives
- Required placement college-level placement in Math and English (through collaboration with local Community College)
2020 Guides
- Education
- Health Sciences
- Information Technology
- Manufacturing and Engineering

edsystemsniu.org(guides

2021 Guides
- Agriculture, Food and Natural Resources
- Architecture, Construction and Energy
- Arts and Communications
- Finance and Business Services
Role of Advisory Committee

Expertise and guidance:
- What are trends in the industry that aren’t reflected in Labor Market Information?
- What credentials/degrees are emerging as most promising in the field?
- How does our desk analysis relate to on-the-ground implementation?
- What are future of work implications for this sector?

Inform key decision-points in this process:
- Pathway map approach
- Selecting strategic early college credit courses
- Identifying key competencies (building from existing State technical competencies)
Model Programs of Study Mapping Process

1. Identify high-priority occupations
2. Determine promising credentials & map stackable degrees/certificates
3. Identify strategic community college courses
4. Map secondary to postsecondary sequence
5. Define related technical competencies

6 month process
Model Programs of Study Mapping Process

1. Identify high-priority occupations
2. Determine promising credentials & map stackable degrees/certificates
3. Identify strategic community college courses
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High Priority Occupations & Promising Credentials

• Using Department of Labor data and the MIT Living Wage Calculator for the State of Illinois as a reference, High Priority Occupation defined
  • Occupations with a positive growth outlook and
  • Occupations whose salaries are near or greater than the “Living Wage” of 1 Adult + 1 Child in Illinois.

• A “promising credential” is a degree or college certification that immediately prepares an individual for entry into a high-priority occupation, with a focus on credentials available in typical Illinois Community College.
  • Credential may also be a clear precursor to or stackable credential for a high-priority occupation.
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
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<td>Accountants and Auditors</td>
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<td>Yes</td>
<td>Bachelor's Degree</td>
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<td>Yes</td>
<td>Bachelor's Degree</td>
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<td>Yes</td>
<td>Yes</td>
<td>Bachelor's Degree</td>
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<td>6%</td>
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<td>First-Line Supervisor of Retail Sales Workers</td>
<td>18.74</td>
<td>No</td>
<td>Yes</td>
<td>High school diploma</td>
<td>5,620</td>
<td>3%</td>
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<tr>
<td>First-Line Supervisor of Office &amp; Administrative Support Workers</td>
<td>28.3</td>
<td>Yes</td>
<td>No</td>
<td>High school diploma</td>
<td>4,450</td>
<td>0%</td>
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<td>First-Line Supervisor of Non-Retail Sales Workers</td>
<td>34.04</td>
<td>Yes</td>
<td>Yes</td>
<td>High school diploma</td>
<td>1,070</td>
<td>3%</td>
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<tr>
<td>Human Resource Assistant</td>
<td>19.49</td>
<td>No</td>
<td>No</td>
<td>Postsecondary nondegree award</td>
<td>380</td>
<td>-4%</td>
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<tr>
<td>Lodging Manager</td>
<td>21.62</td>
<td>No</td>
<td>Yes?</td>
<td>High school diploma or equivalent</td>
<td>180</td>
<td>9%</td>
</tr>
<tr>
<td>Insurance Claims and Policy Processing Clerks</td>
<td>19.94</td>
<td>No</td>
<td>Yes</td>
<td>High school diploma or equivalent</td>
<td>1090</td>
<td>10%</td>
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</tbody>
</table>
Common CC Programs

Guided Transfer
- Business AA**^^
- Accounting AA**^^
- Actuary AA^^

Business AAS, with specialities/certs^^
- General,**
- Insurance,
- HR,**
- Entrepreneurship,**
- Management,**
- Marketing,**
- Hospitality**

Supply Chain
- Supply Chain AAS, AA/AS^^

Accounting
- Accounting AAS**^^

Leading to Occupations/Careers

Entry Level Bachelor’s Degree Positions
- Business Operations Specialist OR Financial Analyst OR Market Research Analysts OR Human Resource Specialist
- Accountants and Auditors
- Actuary

Small/Local Business
- First-Line Supervisor of Retail Sales Workers OR Office & Administrative Support Workers OR First-Line Supervisor of Non-Retail Sales Workers
- Human Resource Assistant OR Lodging Manager OR Insurance Claim Clerk

Supply Chain
- Supply Chain Manager OR Production, Planning, & Expediting Clerks

Clerk Roles
- Payroll & Timekeeping, OR, Bookkeeping, Accounting, & Auditing Clerk, OR Billing and Posting Clerks

** Aligns with ISBE CTE Program of Study Matrix
^^Degree Stacks
Model Programs of Study Mapping Process

1. Identify high-priority occupations
2. Determine promising credentials & map stackable degrees/certificates
3. Identify strategic community college courses
4. Map secondary to postsecondary sequence
5. Define related technical competencies
Identify Strategic Community College Courses

- Analyze “promising credential” program requirements at various Community Colleges in the state

- **Tally and label** all of the “career-focused” & “general education” courses across programs to determine which of these courses:
  - Are most common across targeted programs,
  - Are more likely accessible for dual credit, and
  - Have the potential for transferability and currency (through the Illinois Articulation Initiative) or have industry credentials
## Identify Strategic Community College Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Course Code</th>
<th>Title</th>
<th>Common Name</th>
<th>Prerequisites</th>
<th>IAI Code</th>
<th>Notes</th>
<th>Sum</th>
<th>Is course a key Prereq for other courses</th>
<th>IAI Course?</th>
<th>AA Credit</th>
<th>AAS Credit</th>
<th>AA Other</th>
<th>AAS Other</th>
<th>Business Administration</th>
<th>Advanced/Certificate</th>
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<td>Business 111</td>
<td>Introduction to Business</td>
<td>Intro to Business</td>
<td>None</td>
<td>7</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
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<td>1</td>
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</tr>
<tr>
<td>4</td>
<td>Business 181</td>
<td>Financial Accounting</td>
<td>Financial Accounting</td>
<td>College Level Math Plus BUS 903</td>
<td>9</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
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<td>1</td>
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<tr>
<td>4</td>
<td>Business 182</td>
<td>Managerial Accounting</td>
<td>Managerial Accounting</td>
<td>Business 181 BUS 904</td>
<td>9</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>
Model Programs of Study Mapping Process

1. Identify High-Priority Occupations
2. Determine Promising Credentials & Map Stackable Degrees/Certificates
3. Identify Strategic Community College Courses
4. Map Secondary to Postsecondary Sequence
5. Define Related Technical Competencies
Map Secondary to Postsecondary Sequence

- Recommend early college courses reasonably accessible to HS students, goal is to at least get 6+ career-focused credit hours by HS graduation
- Keep open possibility for unique opportunities, i.e. work-based learning or capstone course
- Consider typical teacher and faculty credentials, as well as course delivery and approval processes
- Suggest initial post secondary courses and sequences that continue to accelerate student
- Recommend sequence in general education subject areas, including early college and AP supplements
Model Programs of Study Mapping Process

1. Identify high-priority occupations
2. Determine promising credentials & map stackable degrees/certificates
3. Identify strategic community college courses
4. Map secondary to postsecondary sequence
5. Define related technical competencies
Define Related Technical Competencies for Key Courses

• Select foundational courses in each Model Programs of Study area
  • Courses map to multiple credentials within the industry area,
  • Can be accessed for early college credit at secondary level, and
  • Not currently recognized by the IL Articulation Initiative (IAI)

• Determine a set of technical competencies for each course (i.e. learning objectives)
State of Illinois
Model Programs of Study Guide:
Agriculture, Food, and Natural Resources
August 2021

Review of the Agriculture, Food, and Natural Resources Guide
# POSTSECONDARY OPTIONS

1. **GUIDED TRANSFER**
   - **Agriculture AA/AS**
   - **Conservation AS**

2. **AGRICULTURE**
   - **Agricultural Business AA**
   - **Precision Agriculture AM**

3. **Horticulture & Plant Science**
   - **Horticulture AA**
   - **Plant and Soil Science AA**

4. **ANIMAL SCIENCE**
   - **Veterinary Tech Certificate**
   - **Animal Science AA**

## SELECTED OCCUPATIONS, WAGES, & JOB GROWTH

<table>
<thead>
<tr>
<th>Program</th>
<th>Typical Job</th>
<th>Near or Above Living Wage Threshold for 1 Adult + 1 Child</th>
<th>Median Hourly Wage</th>
<th>Growth in IL: Annual Job Openings</th>
<th>Growth in IL: % Change Over 10 Years</th>
<th>Stackable?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Guided Transfer</td>
<td>Soil and Water Conservation Scientist</td>
<td>Y</td>
<td>$20.43</td>
<td>73</td>
<td>5%</td>
<td>Typically Stacked to Required Bachelor’s Degree</td>
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<tr>
<td></td>
<td>Agricultural Inspectors</td>
<td>Y</td>
<td>$25.52</td>
<td>63</td>
<td>6%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fish &amp; Wildlife Service</td>
<td>Y</td>
<td>$26.40</td>
<td>63</td>
<td>6%</td>
<td></td>
</tr>
<tr>
<td>2. Agriculture</td>
<td>Precision Agriculture Technician</td>
<td>Y</td>
<td>$24.07</td>
<td>440</td>
<td>10%</td>
<td></td>
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<tr>
<td></td>
<td>Farm and Ranch Managers</td>
<td>Y</td>
<td>$29.51</td>
<td>4,160</td>
<td>7%</td>
<td></td>
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<tr>
<td></td>
<td>Farm &amp; Food Service Workers</td>
<td>Y</td>
<td>$23.60</td>
<td>73</td>
<td>5%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Agribusiness</td>
<td>Y</td>
<td>$9.90</td>
<td>7,980</td>
<td>6%</td>
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<td>3. Horticulture &amp; Plant Science</td>
<td>Nursery and Landscape Managers</td>
<td>Y</td>
<td>$22.81</td>
<td>73</td>
<td>10%</td>
<td></td>
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<tr>
<td></td>
<td>Soil and Plant Scientists</td>
<td>Y</td>
<td>$25.57</td>
<td>60</td>
<td>11%</td>
<td></td>
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</tbody>
</table>

1. Living-wage calculations are based on Illinois, the “Living Wage” for 1 Adult + 1 Child equal to $20.47 hour and “Near” defined as 80% of that statewide living wage, was $22.81 hour. In March of 2007, the Living Wage calculators updated its calculations for Illinois, but information presented in this guide reflects the wage bands as of January 2021, when the project team conducted its analysis.


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**Model Programs of Study Guide: Agriculture, Food, and Natural Resources**

<table>
<thead>
<tr>
<th>Orientation / Introduction</th>
<th>Skill Development</th>
<th>Capstone / Advanced</th>
<th>Recommended 1st Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORIENTATION / INTRODUCTION Grades 9-10</td>
<td>SKILL DEVELOPMENT Grades 10-12</td>
<td>CAPSTONE / ADVANCED Grades 12</td>
<td>POSTSECONDARY COURSES Recommended 1st Year</td>
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<tr>
<td>Basic Agricultural Science or Introduction to the Agricultural Industry</td>
<td>Agriculture Business Management or Introductory Economics of Food, Fiber, and Natural Resources</td>
<td>Introduction to Animal Science or Introductory to Soil Science</td>
<td>Introduction to Microcomputer Skills in Agriculture or Introductory to Crop/Plant Science</td>
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<tr>
<td>Introduction to Horticulture</td>
<td>Introduction to Soil Science</td>
<td>Introductory Economics of Food, Fiber, and Natural Resources</td>
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<td>Career Focused Courses</td>
<td>JCCB</td>
<td>COURSES</td>
<td>JCCB</td>
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<td>Agriscience</td>
<td>Courses and Work-Based Learning Address the FFA Act Recommended Technical and Essential Employability Competencies</td>
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<td>Science Sequence</td>
<td>Science Sequence</td>
<td>Science Sequence</td>
<td>Science Sequence</td>
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<tr>
<td>Social Science Sequence</td>
<td>Social Science Sequence</td>
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<td>Microeconomics or Macroeconomics</td>
<td>Microeconomics or Macroeconomics</td>
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<td>General Education Math or Transitional Math - Quantitative Literacy</td>
<td>General Education Math or Statistics</td>
<td>General Education Math or Quantitative Literacy</td>
<td>General Education Math or Statistics</td>
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<td>English Composition or Transitional English</td>
<td>English Composition or Oral Communication</td>
<td>English Composition or Oral Communication</td>
<td>English Composition or Oral Communication</td>
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<td><strong>WORK-BASED LEARNING</strong></td>
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<td>Career Exploration (C) or FFA Career Development Event</td>
<td>Team-Based Challenge or FFA Career Development Event</td>
<td>Team-Based Challenge or FFA Career Development Event</td>
<td>Team-Based Challenge or FFA Career Development Event</td>
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<td>Supervised Agricultural Experience or Youth Apprenticeship</td>
<td>Supervised Agricultural Experience or Youth Apprenticeship</td>
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<td>Science Sequence</td>
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<td>Microeconomics or Macroeconomics</td>
<td>Microeconomics or Macroeconomics</td>
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<td>General Education Math or Statistics</td>
<td>General Education Math or Quantitative Literacy</td>
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<td>English Composition or Oral Communication</td>
<td>English Composition or Oral Communication</td>
<td>English Composition or Oral Communication</td>
<td>English Composition or Oral Communication</td>
</tr>
</tbody>
</table>

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**Selecting a high school course sequence to meet the learning requirements of the programs:**

1. Courses in this column were accomplished through early college credit or AP courses. Students should take the next required course in the sequence.
2. Courses, additional AM or Major Courses.
<table>
<thead>
<tr>
<th>Program</th>
<th>Typical Job</th>
<th>Near or Above Living Wage Threshold for 1 Adult + 1 Child</th>
<th>Median Hourly Wage (^2)</th>
<th>Growth in IL: Annual Job Openings (^2)</th>
<th>Growth in IL: % Change Over 10 years (^2)</th>
<th>Stackable?</th>
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</thead>
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<tr>
<td>1 Guided Transfer</td>
<td>Soil and Water Conservationist/ Conservation Scientists</td>
<td>Y</td>
<td>$29.43</td>
<td>70</td>
<td>5%</td>
<td>Typically Stacks to Required Bachelor’s Degree</td>
</tr>
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<td></td>
<td>Agricultural Inspectors</td>
<td>Y</td>
<td>$25.52</td>
<td>50</td>
<td>8%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>First-Line Supervisors of Animal Husbandry &amp; Animal Care Workers</td>
<td>Y</td>
<td>$23.43</td>
<td>70</td>
<td>3%</td>
<td></td>
</tr>
<tr>
<td>2 Agribusiness</td>
<td>Precision Agriculture Technicians</td>
<td>Y</td>
<td>$24.07</td>
<td>440</td>
<td>8%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Farm and Ranch Managers</td>
<td>Y</td>
<td>$29.61</td>
<td>4,390</td>
<td>1%</td>
<td>Not Typically Stackable</td>
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<td>First-Line Supervisors of Farming, Fishing, &amp; Forestry Workers</td>
<td>Y</td>
<td>$23.43</td>
<td>70</td>
<td>3%</td>
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<td></td>
<td>Farm Equipment Mechanics and Service Technicians</td>
<td>Y</td>
<td>$22.31</td>
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<td></td>
<td>Agricultural Sales</td>
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<td>First-Line Supervisor of Agricultural Crop Workers</td>
<td>Y</td>
<td>$23.43</td>
<td>70</td>
<td>30%</td>
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<tr>
<td>3 Horticulture &amp; Plant Science</td>
<td>First-Line Supervisor of Horticultural Workers</td>
<td>Y</td>
<td>$23.43</td>
<td>70</td>
<td>30%</td>
<td>Typically Stacks to Related Bachelor’s Program at Select IL Universities or with Additional Coursework</td>
</tr>
<tr>
<td></td>
<td>Nursery and Greenhouse Managers</td>
<td>Y</td>
<td>$29.61</td>
<td>4,390</td>
<td>1%</td>
<td></td>
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<tr>
<td></td>
<td>Soil and Plant Scientist</td>
<td>Y</td>
<td>$26.57</td>
<td>60</td>
<td>11%</td>
<td></td>
</tr>
</tbody>
</table>

1. Living wage calculations are based on: Glasmeier, Amy K. Living Wage Calculator. 2020. Massachusetts Institute of Technology. [livingwage.mit.edu](http://livingwage.mit.edu). As of January 2021 for the state of Illinois, the “Living Wage” for 1 Adult + 1 Child equaled $26.27/hour and “near,” defined as 85% of that statewide living wage, was $22.33/hour. In March of 2021, the Living Wage calculator updated its calculations for Illinois, but information presented in this guide reflects the wage levels as of January 2021, when the project team conducted its analysis.

2. U.S. Department of Labor, CareerOnestop ([careeronestop.org/explorecareers](http://careeronestop.org/explorecareers)), Illinois Department of Employment Security Virtual Labor Market Information ([www2.illinois.gov/ides](http://www2.illinois.gov/ides))
POSTSECONDARY OPTIONS

1. GUIDED TRANSFER
   - Agriculture AA/AS
   - Conservation AS

2. AGRIBUSINESS
   - Agricultural Business AAS
   - Agricultural Production AAS
   - Precision Agricultural AAS

3. HORTICULTURE & PLANT SCIENCE
   - Horticulture AAS
   - Plant and Soil Science AAS

4. ANIMAL SCIENCE
   - Veterinary Tech Certificate
   - Animal Science AAS

Bachelor of Sciences
<table>
<thead>
<tr>
<th>ORIENTATION / INTRODUCTION</th>
<th>SKILL DEVELOPMENT</th>
<th>CAPSTONE / ADVANCED</th>
<th>POSTSECONDARY COURSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grades 9-10</td>
<td>Grades 10-12</td>
<td>Grades 12</td>
<td>Recommended 1st Year</td>
</tr>
<tr>
<td>Basic Agricultural Science</td>
<td>Agriculture Business Management or Introductory Economics of Food, Fiber, and Natural Resources</td>
<td>Introduction to Animal Science or Introduction to Soil Science</td>
<td>Introduction to Microcomputer Skills in Agriculture or Continue AS or AAS Sequence</td>
</tr>
<tr>
<td>or Introduction to the Agricultural Industry</td>
<td>or Horticulture Production &amp; Management or Introduction to Horticulture</td>
<td>or Introduction to Soil Science or Introduction to Crop/Plant Science</td>
<td></td>
</tr>
</tbody>
</table>

Courses and Work-Based Learning Address the PWR Act Recommended Technical and Essential Employability Competencies

<table>
<thead>
<tr>
<th>WORK-BASED LEARNING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Career Exploration (2)* or FFA Career Development Event</td>
</tr>
<tr>
<td>Team-Based Challenge* or FFA Career Development Event</td>
</tr>
<tr>
<td>Supervised Agricultural Experience or Youth Apprenticeship</td>
</tr>
<tr>
<td>Team-Based Challenge</td>
</tr>
<tr>
<td>Supervised Agricultural Experience or Apprenticeship</td>
</tr>
</tbody>
</table>

* May be offered through Career and Technical Student Organizations (CTSOs) including Illinois Association of Agricultural Education (FFA) and Science Olympiad

AP or Dual Credit
Dual Credit Course or Program Prepares for Industry Credential
Postsecondary Course Affiliated with IAI Code
College and Career Pathway Endorsement Earned

If courses in this column were accomplished through early college credit, students should take the next required course in the sequence or, if none, additional AAS or Major Courses
<table>
<thead>
<tr>
<th>Orientation / Introduction</th>
<th>Skill Development</th>
<th>Capstone / Advanced</th>
<th>Postsecondary Courses</th>
</tr>
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<tr>
<td>Grades 9-10</td>
<td>Grades 10-12</td>
<td>Grades 12</td>
<td>Recommended 1st Year</td>
</tr>
<tr>
<td><strong>Science</strong></td>
<td><strong>Science Sequence</strong></td>
<td><strong>Science Sequence</strong></td>
<td><strong>Chemistry</strong></td>
</tr>
<tr>
<td><strong>Social Science</strong></td>
<td><strong>Social Science Sequence</strong></td>
<td><strong>Microeconomics</strong></td>
<td><strong>Microeconomics</strong></td>
</tr>
<tr>
<td><strong>Math</strong></td>
<td><strong>Algebra/Geometry</strong></td>
<td><strong>Geometry/Algebra 2</strong></td>
<td><strong>General Education Math</strong></td>
</tr>
<tr>
<td><strong>English</strong></td>
<td><strong>English Sequence</strong></td>
<td><strong>English Sequence</strong></td>
<td><strong>English Composition</strong></td>
</tr>
</tbody>
</table>

**CoursesRecommended 1st Year**
- Chemistry
- Microeconomics
- General Education Math
- English Composition

**Additional Information**
- If courses in this column were accomplished through early college credit, students should take the next required course in the sequence or, if none, additional AAS or Major Courses.
### AGRICULTURE BUSINESS MANAGEMENT COURSE

**Key Competencies**

<table>
<thead>
<tr>
<th>Business Design</th>
<th>Students can create comprehensive plans for different models of AFNR operations in order to guide business goals, objectives, and resource allocations.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principles of Agricultural Economics</td>
<td>Students can identify and analyze the basic principles of economics and trade in order to manage inputs and outputs of AFNR businesses.</td>
</tr>
<tr>
<td>Business Operations &amp; Personnel Management</td>
<td>Students can assess and implement procedures used to recruit, train, and retain employees in order to create a sustainable pipeline of human resources for AFNR operations.</td>
</tr>
<tr>
<td></td>
<td>Students can identify and apply business management skills in order to conduct AFNR business operations in an efficient, legal, and ethical manner.</td>
</tr>
<tr>
<td></td>
<td>Students can use their understanding of verbal and written communication to effectively maintain relationships with employers, employees, and customers.</td>
</tr>
<tr>
<td>Policy &amp; Regulatory Context</td>
<td>Students can identify sources and seek out relevant and reliable information on current AFNR policies and regulations at different levels of jurisdiction (local, state and federal) in order to understand the impact of those policies on business operations.</td>
</tr>
<tr>
<td></td>
<td>Students can describe basic principles of agricultural law and taxes in order to examine the implications for AFNR operations.</td>
</tr>
<tr>
<td>Financial Management &amp; Reporting</td>
<td>Students can develop and utilize financial and credit management tools in order to achieve AFNR business goals.</td>
</tr>
<tr>
<td>Sales &amp; Marketing</td>
<td>Students can perform tasks and responsibilities related directly or indirectly to sales and marketing in order to develop marketing plans and accomplish goals of sale of AFNR products.</td>
</tr>
</tbody>
</table>
# AGRICULTURE, FOOD, AND NATURAL RESOURCES

**Technical and Essential Employability Competencies**

<table>
<thead>
<tr>
<th>AFNR Systems &amp; Integration</th>
<th>Students can identify and analyze the breadth, depth, and interconnectivity of AFNR systems in order to make sustainable and innovative management decisions.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technology</td>
<td>Students can apply their understanding of relevant technology and tools to collect information and execute effective practices across AFNR systems.</td>
</tr>
<tr>
<td>Policy &amp; Regulations</td>
<td>Students can seek out, analyze, and apply information about relevant public policy and regulations to manage their impact on AFNR production, processing, distribution, and management practices.</td>
</tr>
<tr>
<td>Society &amp; Culture</td>
<td>Students can use their understanding of the local natural and cultural resources, food, and economic context to steward consumer education and connections to AFNR stakeholders.</td>
</tr>
<tr>
<td>Resource Stewardship</td>
<td>Students can identify and analyze essential resources in order to steward them and implement sustainable management practices.</td>
</tr>
<tr>
<td>Ethical Production</td>
<td>Students can apply their understanding of ethical standards and practices in order to produce, process, and distribute AFNR goods and services with integrity.</td>
</tr>
<tr>
<td>Research &amp; Innovation</td>
<td>Students can apply research and critical thinking skills to design innovative practices that address complex challenges in AFNR operations and industries.</td>
</tr>
<tr>
<td>Health, Safety, &amp; Compliance</td>
<td>Students can use their understanding of personal safety and environmental regulations to comply with health and safety requirements as well as maintain safe and proper use of AFNR tools and equipment.</td>
</tr>
</tbody>
</table>
Model Programs of Study in Action: Richland Community College
Department Overview

**Mission:** The mission of the Richland Community College Agriculture Program is to deliver and facilitate high quality educational experiences inside and outside of the classroom which prepare and connect students to careers in Agriculture.

**Vision:** To be the first choice for students pursuing a post-secondary degree in agriculture and to develop the talent needed to serve our agricultural community.

*The Richland Community College Agriculture program consists of an Associate in Arts or Science (transfer degree) and Associate in Applied Science degrees in Agribusiness, Crop Science, and Horticulture.*
WHERE WE ARE

• Richland’s campus includes 120+ acres of farmland, is the host of the Farm Progress Show every other year, and is located in the Agribusiness capital of the world, all which enable the agriculture program to meet our mission of exposing, preparing, and connecting students to careers in Agriculture.

• High Schools in the Richland CC district:
  • Argenta-Oreana, Central A and M, Cerro Gordo, Clinton, Decatur Eisenhower, Heartland Tech Academy, LSA of Decatur, Decatur MacArthur, Maroa-Forsyth, Meridian-Macon, Mt. Zion, Sangamon Valley, Taylorville, Warrensburg-Latham, and St. Theresa (Decatur)
CHALLENGES

- As a re-launched/new agriculture program, finding sufficient time and resources to do all things well…
  - develop outstanding degree programs and courses
  - recruit students effectively in a time when there were no in-person student events
  - convert all courses to an online format (in a short period of time)
  - develop dual-credit and/or articulation agreements
  - etc…
• Consistent program enrollment growth since the re-launch of the program in 2019.
• Scholarships for Agriculture students that cover tuition costs in full, thanks to a private donor to the Richland CC Foundation.
• A new $3.5M agriculture building will be completed in the fall of 2022.
• Successfully connecting students with quality internships.
Dual Credit/Dual Enrollment Options

**Heartland Technical Academy:** All agriculture courses offered are dual-credit.

- [Ag Mechanics and Technology](#)
- [Ag Sciences and Pre-Vet Studies](#)

**Decatur MacArthur and Eisenhower:**

- HORT 100 - Horticulture Science
- AGRIC 235 - Agribusiness Management
What’s Next?

- **Priority 1:** Recruit students to meet the talent needs of the robust agricultural economy within our district.

- **Priority 2:** Effectively develop student’s technical skills to ensure success in an agricultural career and retain students in the agricultural program to achieve program completion.

- **Priority 3:** Engage with Alumni and Agribusiness Stakeholders.
Something still circling in my mind is...

Something that squares with my thinking is...

3 Takeaways I have are...
Share Your Feedback

Survey QR Code

https://niu.az1.qualtrics.com/jfe/form/SV_4VhZXbPLE740vC6
Survey Questions

1. Model Programs of Study
   Assess the implementation of the Model Programs of Study.

2. Advisory Committee
   Assess the effectiveness of the committee or join an upcoming committee.

3. Webinar Review
   Assess the effectiveness of the Webinar session.
Next Steps:
Upcoming Statewide Model Programs of Study Webinars

Information Technology
February 8, 2022 | 2–3:30 p.m.

Architecture, Construction, and Energy
February 22, 2022 | 2–3:30 p.m.

Finance and Business Services
March 15, 2022 | 2–3:30 p.m.

Arts and Communications
April 19, 2022 | 2–3:30 p.m.
Next Steps:
Potential Statewide Model POS Guides Creation

Select from the following:

(Human & Public Services) (Non-Education)

(Culinary and Hospitality)
Highlight and explore innovative models for work-based learning, initial focus on virtual.

Build connections among communities to share best practices, learnings and resources.

Identify needs for state policy changes or support systems.

Engage in conversations on creating sustainable, high-quality models that provide broader and more equitable access, focusing on building social capital for Black and Latinx students.

Explore the Resource Hub and sign up for the newsletter.
Thank You

Survey: https://niu.az1.qualtrics.com/jfe/form/SV_4VhZXbPLe740vC6
Guides: edsystemsniu.org/guides