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

### ORIENTATION / INTRODUCTION
**Grades 9–10**
- Basic Agricultural Science
- or Intro to the Ag Industry

### SKILL DEVELOPMENT
**Grades 10–12**
- Agriculture Business Management
  - or Introductory Economics of Food, Fibers, and Natural Resources
- Horticulture Production & Management
  - or Intro to Horticulture

### POSTSECONDARY COURSES
**Recommended 1st Year**
- Intro to Animal Science
  - or Intro to Soil Science
- Intro to Microcomputer Skills in Agriculture
  - Continue AS or AAS Sequence

### POSTSECONDARY OPTIONS
1. **Guided Transfer**
   - Agriculture AA/AS
   - Conservation AS
   - Agricultural Business AAS
   - Precision Agricultural AAS

2. **Agribusiness**
   - Agricultural Production AAS
   - Horticulture AAS
   - Plant and Soil Science AAS

3. **Horticulture & Plant Science**
   - Veterinary Tech Certificate
   - Animal Science AAS

4. **Animal Science**
   - Bachelor of Arts or Sciences

### WORK-BASED LEARNING
- Career Exploration (2) *
- Team-Based Challenge *
- Team-Based Challenge *
- Supervised Agricultural Experience or Youth Apprenticeship

### SCIENCE
- Biology
  - or General Biology for Non-Majors
- Microeconomics
  - or General Education Math
  - or Translational Math: Quantitative Literacy Statistics
- Chemistry
  - Microeconomics
  - or General Education Math
  - or Statistics
- English Composition
  - or Translational English

### SOCIAL SCIENCE
- Social Science Sequence

### MATH
- Algebra/Geometry
- Geometry/Algebra 2

### ENGLISH
- English Sequence

### 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><strong>1. Guided Transfer</strong></td>
<td>Soil and Water Conservationists</td>
<td>$25.43</td>
<td>70.5%</td>
<td>8%</td>
<td>9%</td>
<td>Typically Stacks to Required Bachelor’s Degree</td>
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<tr>
<td></td>
<td>Agricultural Inspectors</td>
<td>$25.32</td>
<td>50.8%</td>
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<td></td>
<td>First-Line Supervisors of Animal</td>
<td>$25.43</td>
<td>70.3%</td>
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<td></td>
<td>Husbandry &amp; Animal Care Workers</td>
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<td></td>
<td>Introductory Economics of Food, Fibers, and Natural Resources</td>
<td>$25.43</td>
<td>70.3%</td>
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<tr>
<td><strong>2. Agribusiness</strong></td>
<td>Precision Agricultural Technicians</td>
<td>$24.07</td>
<td>440.8%</td>
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<td></td>
<td>Not Typically Stackable</td>
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<td></td>
<td>Farm and Ranch Managers</td>
<td>$23.43</td>
<td>4,390.1%</td>
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<td></td>
<td>Fishing, &amp; Forestry Workers</td>
<td>$23.43</td>
<td>70.3%</td>
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<td></td>
<td>Farm Equipment Mechanics</td>
<td>$22.31</td>
<td>170.9%</td>
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<td></td>
<td>and Service Technicians</td>
<td>$22.31</td>
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<td><strong>3. Horticulture &amp; Plant Science</strong></td>
<td>Agricultural Sales</td>
<td>$21.96</td>
<td>1,910.8%</td>
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<td></td>
<td>First-Line Supervisor of Agricultural</td>
<td>$25.43</td>
<td>70.3%</td>
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<td>Crop Workers</td>
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<td></td>
<td>Precision Agricultural Technicians</td>
<td>$25.43</td>
<td>70.3%</td>
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<tr>
<td></td>
<td>Nursery and Greenhouse Managers</td>
<td>$20.31</td>
<td>4,390.1%</td>
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<td></td>
<td>Soil and Plant Scientist</td>
<td>$23.57</td>
<td>60.9%</td>
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</tbody>
</table>

1. Living wage calculations are based on: Glazer, 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 equalled $22.37/hour and “near” defined as 85% of that statewide living wage, $22.37/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.