

KANSAS CAREER PATHWAYS | KANSAS CAREER CLUSTER GUIDANCE HANDBOOK 2023-2024

AGRICULTURE, FOOD AND NATURAL RESOURCES CAREER CLUSTER DESIGN

Comprehensive Agricultural Science Pathway

CIP CODE 01.9999

APPROVED PATHWAY:

- 1. Includes a minimum of three secondarylevel credits.
- 2. Includes a workbased element
- 3. Consist of a sequence:
 - Introductorylevel course.
- Technical-level course.
- Applicationlevel course.
- 4. Supporting documentation includes:
- Articulation Agreement(s).
- Certification.
- Program Improvement Plan.
- · Program of Study.
- 5. Technical-level and Applicationlevel courses receive.5 state weighted funding in an approved CTE pathway.

INTRODUCTORY LEVEL

Title	Code	Credit
* • Introduction to Agriculture	18001	1
* • Exploratory Agriculture	68001	1

TECHNICAL LEVEL

Must choose at least TWO of the courses in this level.

Title	Code	Credit
Agriscience	18002	1
Horticulture	18052	1
Plant and Soil Science	18058	1
Animal Science	18101	1
Plant and Animal Science	18301	1
Agricultural Food Science	18305	1
Biotechnology in Agriculture	18308	1
Natural Resource Management	18504	1

APPLICATION LEVEL

Title	Code	Credit
Internship	18048	1
Advanced Internship	18049	1
Agricultural Business	18201	1
Agricultural Entrepreneurship	18202	1
Agricultural Leadership and Communications	18203	1
Research in Agriculture	18206	1
Advanced Plant and Animal Science	18302	1

Pathway Design prior to Cluster Review

- Required courses in pathway approval.
- Must choose ONE of the required courses in Introductory Level for pathway approval.



APPROVED PATHWAY:

- Includes a work-based element.
- 3. Consist of a sequence:
- Introductorylevel course.
- Technical-level course.
- Applicationlevel course.
- Supporting documentati on includes:
- Articulation Agreement(s).
- · Certification.
- Program
 Improvement
 Plan.
- Program of Study.
- 5. Technicallevel and Applicationlevel courses receive.5 state weighted funding in an approved CTE pathway.

KANSAS CAREER PATHWAYS | KANSAS CAREER CLUSTER GUIDANCE HANDBOOK

AGRICULTURE, FOOD AND NATURAL RESOURCES CAREER CLUSTER DESIGN

Diversified Agricultural Science

KANSAS CAREER PATHWAYS | KANSAS CAREER CLUSTER GUIDANCE HANDBOOK

CIP CODE 01.0000

INTRODUCTORY LEVEL

Title	Code	Credit
\$Agriculture Explorations I	68001	0.5
\$#Agriculture Explorations II	68002	0.5
\$Introduction to Agriculture	18001	1.0

TECHNICAL LEVEL

Title	Code	Credit
Agriscience	18002	1.0
Horticulture	18052	1.0
Plant and Soil Science	18058	1.0
Animal Science	18101	1.0
Plant and Animal Science	18301	1.0
Agricultural Food Science	18305	1.0
Agricultural Biotechnology	18308	1.0
Natural Resource	18504	1.0
Management		
^Ag Mechanics	18401	1.0
^Small Power Systems	18410	1.0
^Agricultural Welding I	18404	1.0

APPLICATION LEVEL

Title	Code	Credit
Small Animal Care	18102	1.0
Equine Science	18104	1.0
Capstone In Agriculture	18003	
Agricultural Engineering	18415	1.0
and Technology		
^Agricultural Construction	18403	1.0
^Agricultural Fabrication	18409	1.0
Agricultural Internship	18048	1.0
Agribusiness Management	18201	1.0
Agricultural	18202	1.0
Entrepreneurship		
Agricultural Leadership	18203	1.0
and Communications		
Research in Agriculture	18206	1.0
#Advanced Plant and	18302	1.0
Animal Science		
Sustainable/Alternative	18130	1.0
Agriculture		

Proposed Pathway Design after Cluster Review

Must have: One Introductory Level course, one Technical Level course, one Application Level course and one additional course from the Technical or Application Level

- # Has as specific prerequisite course.
- \$ ONE of the courses marked \$ in this section is required.
- $^{\wedge}$ Courses marked $^{\wedge}$ have a required prerequisite of either 18001 or 18002

Pathway Recommendations Summary:

General Changes to Pathway

- Recommended name change for pathway:
 - o New Pathway name to reflect the diversity of Agriculture in Kansas.
- CIP Code recommendation:
 - o CIP Code updated as no jobs were connected to 01.9999.
- Pathway course requirements:
 - o Must include, one Introductory Level course, one Technical Level course, one Application Level course and one additional course from the Technical or Application Level.

No Recommend Changes CTE Course Competencies and Indicators (ksde.org)

- Courses Reviewed with no changes.
 - o 18048 Agricultural Internship (recommended name change from Ag Internship).
 - o 18058 Plant and Soil Science.
 - o 18202 Agricultural Entrepreneurship.
 - o 18308 Agricultural Biotechnology (name change from Biotechnology in Agriculture).

Courses Reviewed with Recommended Changes

- Courses being removed from the pathway.
 - o 18049 Advanced Internship (No real path to completion status if two internship courses are taken.)
- Courses with updated competencies and benchmarks.
 - o 68001 Agriculture Explorations I (recommended name change from Exploratory Agriculture) competencies updated and revised as a .5 credit course. Will serve as prerequisite for new course 68002 Agriculture Explorations II .5 credit course.
 - o 18001 Introduction to Agriculture competencies updated and revised. Prerequisite option for lab courses in which safety is a concern.
 - o 18002 Agriscience competencies updated and revised. Prerequisite option for lab courses in which safety is a concern.
 - o 18052 Horticulture competencies updated and revised.
 - o 18101 Animal Science competencies updated and revised.
 - o 18201 Agribusiness Management (recommended name change from Agricultural Business) competencies updated and revised.
 - o 18203 Agricultural Leadership and Communications competencies updated and revised.
 - o 18206 Research in Agriculture competencies updated and revised.
 - o 18301 Plant and Animal Science competencies updated and revised.
 - o 18302 Advanced Plant and Animal Science 18301 Plant and Animal Science prerequisite. Competencies updated and revised.
 - o 18305 Agricultural Food Science competencies updated and revised.
 - o 18504 Natural Resource Management competencies updated and revised.

New Course Recommendations

- Existing courses recommended to be added to this Pathway.
 - o 18102 Small Animal Care Course reviewed but no changes to the competencies.
 - o 18104 Equine Science competencies updated and revised.
 - o 18401 Ag Mechanics competencies updated and revised. Prerequisite of 18001 or 18002 required.
 - 18403 Agricultural Construction (recommended name change from Ag Structures) competencies updated and revised.
 Prerequisite of 18001 or 18002 required.
 - o 18404 Agricultural Welding I competencies updated and revised. Prerequisite of 18001 or 18002 required.
 - o 18409 Agricultural **Fabrications** competencies updated and revised. Prerequisite of 18001 or 18002 required.
 - o 18410 Small Power Systems (recommended name change from Small Gas Engines) competencies updated and revised.
- NEW courses developed and recommended to be added to this Pathway.
 - o 68002 Agriculture Explorations II Introductory course for middle grades, (prerequisite of 68001 required) .5 credit course.
 - o 18003 Capstone in Agriculture Application rigor with competencies from each Agricultural area
 - 18415 Agricultural Engineering and Technology Application rigor focusing on engineering, automation, and other emerging technologies in Agriculture. Prerequisite of 18001 or 18002 required.
 - 18310 Sustainable/Alternative Agriculture Application rigor focusing on sustainability practices for Agricultural resources including water management, pest control, and alternative production practices.