



AGRICULTURE, FOOD AND NATURAL RESOURCES CAREER CLUSTER DESIGN

# Natural Resources and Environmental Systems Pathway

CIP CODE 03.0101

**APPROVED PATHWAY:**

1. Includes a minimum of three secondary-level credits.
2. Includes a work-based element.
3. Consist of a sequence:
  - Introductory-level course.
  - Technical-level course.
  - Application-level course.
4. Supporting documentation includes:
  - Articulation Agreement(s).
  - Certification.
  - Program Improvement Plan.
  - Program of Study.
5. Technical-level and Application-level 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**

Title	Code	Credit
Agriscience	18002	1
* Natural Resources 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
* Environmental Resources and Wildlife Science	37506	1

- \* Required courses in pathway approval.
- A minimum of **ONE** course from each level is required for pathway approval.

**Pathway Design prior to Cluster Review**



# AGRICULTURE, FOOD AND NATURAL RESOURCES CAREER CLUSTER DESIGN

## Natural Resources and Environmental Sustainability

### CIP CODE 01.0000

#### APPROVED PATHWAY:

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

#### 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
\$Natural Resources Management	18504	1.0
\$Wildlife and Recreation Management	18501	1.0

#### APPLICATION LEVEL

Title	Code	Credit
\$Environmental Resources and Ecology	37506	1.0
\$Sustainable/Alternative Agriculture	18310	1.0
Agricultural Internship	18048	1.0
Advanced Agricultural Internship	18049	1.0
Agribusiness Management	18201	1.0
Agricultural Entrepreneurship	18202	1.0
Agricultural Leadership and Communications	18203	1.0
Research in Agriculture	18206	1.0

## Proposed Pathway Design after Cluster Review

# Has as specific prerequisite course.

\$ ONE of the courses marked \$ in this section is required.

^ Courses marked ^ have a required prerequisite of either 18001 or 18002

# Pathway Recommendations Summary:

## General Changes to Pathway

- Recommended name change for pathway:
  - New Pathway name to reflect the growing demand for occupations associated with Natural Resources and sustainability of resources in Kansas.

## No Recommend Changes [CTE Course Competencies and Indicators \(ksde.org\)](https://ksde.org)

- Courses Reviewed with no changes.
  - 18048 Agricultural Internship (recommended name change from Ag Internship.)
  - 18049 Advanced Agricultural Internship (recommended name change from Advanced Internship.)
  - 18202 Agricultural Entrepreneurship.

## Courses Reviewed with Recommended Changes

- Courses with updated competencies and benchmarks.
  - 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.
  - 18001 Introduction to Agriculture – competencies updated and revised. Prerequisite option for lab courses in which safety is a concern.
  - 18002 Agriscience – competencies updated and revised. Prerequisite option for lab courses in which safety is a concern.
  - 18201 Agribusiness Management (recommended name change from Agricultural Business) – competencies updated and revised.
  - 18203 Agricultural Leadership and Communications – competencies updated and revised.
  - 18206 Research in Agriculture – competencies updated and revised.
  - 18504 Natural Resources Management – competencies updated and revised.
  - 37506 Environmental Resources and Ecology – (recommended name change from Environmental Resources and Ecology) – competencies updated and revised.

## New Course Recommendations

- NEW courses developed and recommended to be added to this Pathway.
  - 68002 Agriculture Explorations II – Introductory course for middle grades, (prerequisite of 68001 required) .5 credit course.
  - 18310 Sustainable/Alternative Agriculture – NEW course, focusing on skills needed for sustainable Agricultural production including water management.
  - 18501 Wildlife and Recreation Management – NEW course, combining the fields of ecology and conservation with planning for the efficient use and preservation of land, water, wildlife, and forests.