

Agricultural and Environmental Systems Career Field Pathways and Course Structure

Agribusiness & Production Systems	Agricultural & Industrial Power Technology	Animal Science & Management	Biotechnology for Food, Plant and Animal Science	Food Science & Technology	Horticulture	Natural Resource Management
A0	A1	A2	A3	A4	A5	A6
Pathway Courses Agriculture, Food and Natural Resources ¹ Animal Science and Technology ² Plant & Hort Science ² Agronomic Systems Animal Nutrition, Health, and Reproduction Business Management Greenhouse & Nursery Management Livestock Science Meat Science Small Animal Science Veterinary Science Electives A&P Biotechnology ² A&E Capstone ³ Ag & Industrial Power ² Communications and Leadership Energy Systems Mgt. Environmental Science Equine Science & Mgt. Natural Resources ² Science & Technology of Food ² Structural Engineering	Pathway Courses Agriculture, Food and Natural Resources ¹ Ag & Industrial Power ² Electronic & Electrical Systems Engines and Fuel Systems Hydraulics and Pneumatics Outdoor Power Technology Power Sports Power Trains Electives Business Management A&E Capstone ³ Communications and Leadership	Pathway Courses Agriculture, Food and Natural Resources ¹ Animal Science and Technology ² Animal Nutrition, Health and Reproduction Equine Science & Mgt. Livestock Science Small Animal Science Veterinary Science Wildlife and Fisheries Zoo and Aquarium Electives A&P Biotechnology ² Business Management A&E Capstone ³ Communications and Leadership Structural Engineering	Pathway Courses Agriculture, Food and Natural Resources ¹ Animal and Plant Biotechnology ² Biotechnology and Bioinformatics Genetics and Laboratory Diagnostics Electives Science & Technology of Food ² A&E Capstone ³ Communications and Leadership	Pathway Courses Agriculture, Food and Natural Resources ¹ Science & Technology of Food ² Applications of Food Science and Technology Food Marketing and Research Meat Science & Technology Microbial Food Science and Safety Electives A&P Biotechnology ² Business Management A&E Capstone ³ Communications and Leadership	Pathway Courses Agriculture, Food and Natural Resources ¹ Plant and Horticultural Science ² Floral Design and Marketing Greenhouse and Nursery Management Landscape Design and Build Landscape Systems Management Turf Science & Management Urban Forestry Electives A&P Biotechnology ² Business Management A&E Capstone ³ Communications and Leadership Natural Resources ² Ag & Industrial Power ²	Pathway Courses Agriculture, Food and Natural Resources ¹ Natural Resources ² Energy Systems Management Environmental Science Environmental Systems Management Forestry & Woodland Ecosystems Park & Recreational Management Urban Forestry Wildlife & Fisheries Electives Business Management A&E Capstone ³ Communications and Leadership Zoo and Aquarium

¹First course in the Career Field; ²First course in the Pathway; ³Does not count as one of the required four courses