

**OFFICE OF CHIEF SCHOOL AND DISTRICT TRANSFORMATION OFFICER**  
**Summary of State Board of Education Agenda Items**  
**Consent Agenda**  
**January 15, 2026**

**OFFICE OF CAREER AND TECHNICAL EDUCATION**

H. Approval to begin the Administrative Procedures Act process: To revise selected Mississippi Secondary Curriculum Frameworks in Career and Technical Education

**Executive Summary**

The Mississippi Secondary Curriculum Frameworks have a two-year or four-year curricula revision cycle. The revision cycle includes input from local district personnel and business/industry partners. Approved secondary curricula will be disseminated for implementation in the 2026-2027 school year.

The following secondary curriculum frameworks are recommended for approval:

1. Advanced Manufacturing
2. Diversified Agriculture - Agribusiness Core
3. Diversified Agriculture - Animals Core
4. Diversified Agriculture - Environment Core
5. Diversified Agriculture - Mechanization Core
6. Diversified Agriculture - Plants Core
7. Principles of Agriscience
8. Information Technology - Networking
9. Lodging, Hospitality, and Tourism

All curricula frameworks are designed to provide local programs with an instructional foundation that can be used to develop localized instructional management plans and course syllabi. Additionally, the frameworks include the following elements for each revised secondary curriculum:

- ❖ Program
- ❖ Description
- ❖ Classification of Instructional Program (CIP) Code and CIP Name
- ❖ Course Outline and Codes
  - Curriculum
  - Student Competencies
  - Suggested Student Objectives

NOTE: The Office of Career and Technical Education has provided executive summaries of the curriculum framework revisions. The detailed documents are available upon request.

Recommendation: Approval

Back-up material attached

## **Summary of Secondary Curricula Revisions for Career and Technical Education**

### **2026 Advanced Manufacturing**

- Document in new curriculum format.
- Competencies and objectives reflect current standards and industry recommendations.
- All items listed below as "Moved," "Created," or "Revised" in any way, or "Combined" were implemented upon the attending industry representatives' requests.
- Unit 1 - Orientation → Orientation and Program Overview
  - Expanded to include employer expectations, program structure, and WBL opportunities. Increased DOK level and clarified alignment to industry standards.
- Unit 2 - Basic Safety → Safety in Advanced Manufacturing
  - Greatly expanded to include OSHA/NIOSH/EPCRA/EPA standards, LOTO, HAZMAT, arc flash, confined spaces, and emergency response. Safety becomes yearlong, with a required 100% safety test.
- Unit 3 - Employability Skills
  - Expanded leadership, teamwork, and communication skills. Added statewide labor market research expectations through MDGES and ServeTheSip.
- Unit 4 - Fundamentals of Student Organizations
  - Strengthened CTSO alignment, added branding and graphic standards, and incorporated SkillsUSA/TSA competition requirements.
- Unit 5 - Math in the Manufacturing Industry (New Structure)
  - Consolidated construction math and measurement concepts from multiple 2021 units. Added applied scenarios, production math, and precision measurement integration.
- Unit 6 - Hand Tools
  - Updated tool use, maintenance, and fastener selection competencies. Enhanced safety expectations and operational accuracy.
- Unit 7 - Power Tools
  - Reinforced safe operational demonstrations and removed duplicated safety content (now centralized in Unit 2).
- Unit 8 - Technical Drawings
  - Major expansion: added GD&T, tolerances, surface finish symbols, thread standards, and multi-view drawings. Supports more advanced fabrication and assembly units.
- Units 9-11 - Fabrication, Welding & Cutting, Basic Assembly
  - All units expanded to include safety huddles, ergonomics, material handling, shop math, reading technical plans, and logistics. Increased realism of industry simulations and added career exploration.

- Unit 12 - Advanced Manufacturing Program Overview (New)
  - Introduces advanced manufacturing roles, apprenticeship pathways, expectations of craftworkers, and personal/workplace professionalism.
- Unit 13 - Machine and Tool Safety Overview (New)
  - Adds machine documentation, maintenance schedules, guards/interlocks, shutdown/startup procedures, and lubrication systems.
- Unit 14 - Precision Measurement
  - Expanded tool list, deeper measurement accuracy requirements, and added SI/metric/imperial conversions for precision manufacturing.
- Unit 15 - Machine Operation (New)
  - Introduces foundational machining processes needed before robotics, PLCs, and automation content.
- Unit 16 - Circuits and Electronics
  - Condensed hours but increased focus on applied electronics relevant to robotics, sensors, and PLC integration.
- Unit 17 - Hydraulics and Pneumatics
  - Strengthened troubleshooting and system maintenance competencies.
- Unit 18 - Programmable Logic Controllers
  - Expanded hours (15 → 30) and aligned to SACA Industry 4.0 standards.
- Unit 19 - Robotics and Automation
  - Expanded hours (15 → 30) with more emphasis on IIoT, safety around robotics, programming basics, and automation systems.
- Unit 20 - Additive & Subtractive Manufacturing Systems (New)
  - Introduces 3D printing, CNC subtractive processes, prototyping, and modern manufacturing workflows.
- Unit 21 - Advanced Manufacturing Systems (New)
  - Covers systems integration, automated production lines, predictive maintenance, and real-time data use.
- Unit 22 - Workforce Readiness
  - Strengthened communication, professional behavior, and technical writing skills tied to employer expectations.

### **2026 Diversified Agriculture - Agribusiness Core**

- Document in new curriculum format.
- Competencies and objectives reflect current standards and industry recommendations.
- All items listed below as "Moved," "Created," or "Revised" in any way, or "Combined" were implemented upon the attending industry representatives' requests.
- Unit 1 - Leadership and SAE for All
  - Expanded FFA opportunities list to include additional LDEs and CDEs (e.g., Employment Skills, Agricultural Communications, Agricultural Issues Forum).
  - Added exploration of SAE grant opportunities from National FFA.
  - Revised recordkeeping expectations to include state-approved electronic systems.

- Strengthened emphasis on career readiness, résumé development, and interview skills.
- Unit 2 - Safety (New Unit)
  - Safety instruction was removed from other units and developed as a dedicated, ongoing unit.
  - Incorporates OSHA standards, SDS interpretation, PPE usage, and safe laboratory practices.
  - Added a required 100% mastery written safety test prior to lab participation, with ongoing documentation.
- Unit 3 - Principles of Agribusiness and Entrepreneurship
  - Expanded coverage of LLCs, incorporation, and e-commerce.
  - Added enrichment activity referencing USDA's 12 Steps for Starting a Cooperative.
  - Updated federal agency examples and clarified cooperative development principles.
- Unit 4 - Financial Management in Agribusiness
  - Updated terminology and examples for modern financial instruments (e.g., cryptocurrency, real estate investment).
  - Added FSA Youth Loan as an example under loan application processes.
  - Expanded investment topics and included new examples for time value of money and amortization.
- Unit 5 - Implementing, Planning, and Decision-Making Through Budgeting
  - Moved from Unit 8 (2022) to earlier position for better sequencing.
  - Reemphasized SMART goals for both personal and business settings.
  - Integrated use of enterprise, whole-farm, partial, and cash flow budgets in agribusiness applications.
- Unit 6 - Examining Financial Performance
  - Added requirement to use online recordkeeping software for financial statements (balance sheet, income statement, cash flow).
  - Expanded application of financial analysis ratios and introduced profitability evaluation using digital tools.
- Unit 7 - Taxes, Risk Management, and Legal Concepts
  - Combines 2022 Units 5 ("Taxes and Legal Concepts") and 7 ("Risk Management").
  - Adds coverage of Farm Bill legislation, Mississippi-specific regulatory agencies, and risk management in capital use.
  - Expanded discussion of insurance, leasing, and land ownership risks.
  - Introduced evaluation of machinery management plans and production risk mitigation.
- Unit 8 - Agricultural Economics
  - Moved from Unit 6 (2022) and revised for greater clarity.
  - Expanded focus on U.S. economic characteristics (added "tariffs" to system descriptions).
  - Maintained emphasis on micro- and macroeconomic principles, with reinforced focus on cost analysis and supply and demand.
- Unit 9 - Agribusiness Marketing and Sales

- Combines content from 2022 Units 9 (“Establishing an Agribusiness”) and 10 (“Agribusiness Marketing and Sales”).
- Integrates FFA CDE applications (Marketing Plan and Ag Sales).
- Added hands-on projects in product promotion, display design, and advertising media development.
- Expanded international marketing and Mississippi-based branding (via GenuineMS.com enrichment).
- Unit 10 - Management and Administration of Agribusiness
  - Newly created in 2026 to address strategic, tactical, and operational planning.
  - Introduces succession planning, leadership in management, and organizational structures.
  - Serves as a capstone connecting economics, marketing, and financial management concepts into a holistic agribusiness management framework.

### **2026 Diversified Agriculture - Animals Core**

- Document in new curriculum format.
- Competencies and objectives reflect current AFNR standards, CCR alignment, and industry recommendations.
- All items listed below as “Moved,” “Created,” “Revised,” or “Combined” were implemented upon the attending industry representatives’ requests.
- Unit 1 - Leadership and SAE for All
  - Maintains focus on FFA participation with expanded examples of CDEs and LDEs, including Dairy, Horse, Livestock, Meats, Poultry, and Veterinary Science events.
  - Added use of AET for recordkeeping and emphasized SAE for All documentation.
    - Integrated digital resources such as AgExplorer and O\*NET for career research.
  - Added enrichment directing students to saeforall.org for Immersion SAE guidance.
- Unit 2 - Introduction to Animal Agriculture
  - Combined foundational safety and animal industry content from 2022’s Units 2 and 3.
  - Now begins with laboratory safety protocols, PPE, and OSHA standards.
  - Expanded species content with new references to vertical integration in swine, poultry, and aquaculture industries.
  - Added exploration of career opportunities within each species area.
  - Introduced supply chain and integration analysis as a DOK 3-level activity.
- Unit 3 - Biosecurity and Emergency Management
  - Refined from the 2022 “Worker Safety, Biosecurity, and Emergency Management.”
  - Added State Board of Animal Health and CDC to emergency action plan (EAP) contact lists.
  - Strengthened connections to biosecurity protocols, outbreak management, and hazard identification.

- Moved safety scenarios from 2022's Unit 3 to integrate emergency response planning.
- Unit 4 - Application of Feed and Feeding to Animal Growth and Production
  - Retained and reorganized major 2022 content for nutrition, digestion, and ration formulation.
  - Introduced digital feed formulation and analysis tools alongside traditional Pearson Square.
  - Moved workplace safety and PPE expectations into this unit for feed-related tasks.
  - Expanded forage management coverage to include baleage and enhanced DOK alignment for forage utilization systems.
- Unit 5 - Animal Reproduction
  - Combines 2022 Units 5 ("Genetics") and 6 ("Animal Reproduction") into a single comprehensive unit.
  - Includes Punnett square prediction, genetic traits, and breeding systems together for continuity.
  - Expanded coverage of estrus synchronization with hormone-specific terminology (CIDR, LH, FSH, GnRH).
  - Added safety procedures for AI equipment, semen handling, and ultrasound use.
  - Introduced digital technologies for tracking and managing reproductive data.
- Unit 6 - Livestock Evaluation and Selection
  - Retains focus on market, breeding, and performance livestock evaluation.
  - Removed repetitive market classes and streamlined evaluation criteria.
  - Updated language to reflect use of digital scoring systems and livestock evaluation apps.
  - Consolidated performance data and EPD explanations across species.
  - Emphasized reasoning and communication skills aligned with FFA CDE rubrics.
- Unit 7 - Animal Production Management
  - Combines and refines 2022's Units 8 and 11 for integrated management focus.
  - Expanded PPE, disease prevention, and health management protocols.
  - Added zoonotic disease coverage and advanced delivery methods (e.g., intravenous, infusion).
  - Strengthened application of marketing practices, enterprise management, and critical livestock procedures.
- Unit 8 - Facility and Equipment Management in Animal Agriculture
  - Maintains 2022 structure but emphasizes safe handling, transport, and facility design.
  - Removed redundant sales components (now integrated in Unit 7).
  - Adds focus on animal welfare, restraint techniques, and emergency preparedness for transport.
  - Updated DOK levels to reflect applied learning and practical assessment.

- Unit 9 - Issues in Animal Agriculture
  - Expanded discussion of animal welfare, animal rights, and consumer concerns.
  - Adds coverage of marketing goals (organic, antibiotic-free, free-range) and food policy regulations.
  - Introduced FSMA, FDA, USDA, and HACCP standards as critical regulatory content.
  - Strengthened analysis of public perception and social awareness of animal production.
- Unit 10 - Farm to Fork (New Unit)
  - Newly created in 2026 to emphasize food systems, safety, and traceability.
  - Follows the farm-to-consumer journey through raising, processing, packaging, transporting, and marketing.
  - Integrates USDA FSIS inspection standards, humane handling, and sanitation.
  - Highlights differences between small-farm and large-scale operations.
  - Reinforces career awareness in food inspection, safety, and supply logistics.

## **2026 Diversified Agriculture - Environment Core**

- Document in new curriculum format.
- Competencies and objectives reflect current AFNR standards, CCR alignment, and industry recommendations.
- All items listed below as “Moved,” “Created,” “Revised,” or “Combined” were implemented upon the attending industry representatives’ requests.
- Unit 1 - Leadership and SAE for All
  - Expanded list of FFA events to include Envirothon, Land Evaluation, and Environmental and Natural Resources.
  - Added agency awareness section (EPA, NRCS, NPS, USFS, MDWFP, MFC, MDEQ, Extension).
  - Strengthened employability and career readiness tasks - résumé, application, interview, and speech development.
  - Continued focus on SAE recordkeeping with digital documentation through AET.
- Unit 2 - Introduction to the Agricultural Environment and Application of Ecology
  - Introduces environmental science terms and core ecological concepts earlier in sequence.
  - Added field and lab safety expectations as a yearlong emphasis.
  - Merged and expanded ecology, biomes, and human impact discussions.
  - Added current trends topics: climate change, population growth, international trade, and resource sustainability.
  - Strengthened DOK level to 4 for applied local environmental projects.
- Unit 3 - Living Organisms and Ecology
  - New unit expanding upon population ecology and ecosystem relationships.
  - Adds microorganism study (bacteria, fungi, protista, nematodes, invertebrates) and microscope lab activities.

- Includes wetland ecology and pollution remediation case studies.
  - Links biodiversity to environmental quality and restoration practices.
- **Unit 4 - The Atmosphere and Environmental Quality**
  - Combines climate, air, and water content into an integrated study of environmental quality.
  - Adds detailed weather instrumentation (thermometer, barometer, anemometer, hygrometer, rain gauge).
  - Expands content on air quality, pollution sources, and atmospheric layers.
  - Introduces water classifications, storage systems, and treatment processes (household and municipal).
  - Adds GPS and GIS technology applications for environmental data analysis.
- **Unit 5 - Soil, Land, and Mapping**
  - Enhanced focus on soil formation, structure, texture, and classification.
  - Introduces digital mapping and remote sensing with NRCS Web Soil Survey (WSS).
  - Expands surveying content (GPS, GIS, precision agriculture concepts).
  - Added DOK 4-level tasks on cartography, spatial relationships, and environmental data visualization.
  - Consolidated erosion control and conservation practices (mulching, no-till, terraces, strip cropping).
- **Unit 6 - Water Quality Management**
  - Retains 2022 water quality content but adds wetlands identification and delineation (hydrology, hydric soils, hydrophytic vegetation).
  - Introduces macroinvertebrate indicators (mayflies, caddisflies, crayfish, leeches, aquatic worms).
  - Expanded pollution sources and point vs. nonpoint differentiation.
  - Added hands-on water testing activities and quality metrics (pH, turbidity, metals, pathogens).
  - Includes aquifer types (artesian vs. unconfined groundwater) and testing tools (Secchi disk, d-net, water quality kits).
- **Unit 7 - Forest Management**
  - Combines and updates 2022 forestry units into a comprehensive forest ecology and management unit.
  - Adds dendrology and mensuration skills: diameter, height, and volume measurement.
  - Introduces invasive species (kudzu, privet, bamboo, Chinese tallow) and forest pests (southern pine beetle, emerald ash borer).
  - Expanded silviculture practices and controlled burning techniques.
  - Added Drip torch, clinometer, and GPS applications for data collection and analysis.
- **Unit 8 - Wildlife Management**
  - Combines and expands 2022 wildlife units into a capstone ecology and conservation focus.
  - Strengthened population ecology, food webs, and habitat management principles.

- Adds wildlife classification by conservation status (nuisance, protected, endangered, extinct).
- New content: invasive species management, wildlife tracking tools, pest impact analysis, and integrated pest management methods.
- Reinforces Mississippi focus - species such as whitetail deer, wild turkey, quail, wood duck, and largemouth bass.
- Includes FFA CDE integration with Wildlife, Forestry, and Environmental/Natural Resources.

## **2026 Diversified Agriculture - Mechanization Core**

- Document in new curriculum format.
- Competencies and objectives reflect current AFNR standards, CCR alignment, and industry recommendations.
- All items listed below as “Moved,” “Created,” “Revised,” or “Combined” were implemented upon the attending industry representatives’ requests.
- Unit 1 - Leadership and SAE for All
  - Retains foundational leadership structure, expanding CDE/LDE references to include Agricultural Technology & Mechanical Systems and Arc Welding contests.
  - Adds Agricultural Mechanics Showcase and updated SAE examples (school-based enterprise, invention, service learning).
  - Expanded employability focus - résumé, interview, scholarship, and college readiness tasks.
  - Updated AET recordkeeping examples to align with digital documentation expectations.
- Unit 2 - Safety
  - Moved from mid-curriculum (2022 Unit 3) to early-year placement.
  - Consolidated OSHA, PPE, SDS, and safety color coding content into one unit with required yearlong application.
  - Expanded tool safety coverage - now includes hand, portable power, and stationary tool identification and maintenance.
  - New safety components: lifting/hoisting equipment, chains, slings, cranes, and fall protection systems.
  - Retains 100% written safety test requirement prior to lab participation (now explicitly documented per site).
- Unit 3 - Introduction to Agricultural Mechanization
  - Combines foundational physics, measurement, and mechanical principles.
  - Added emphasis on math applications (metric-standard conversions, volume, and surface area calculations).
  - Expanded blueprint reading and project construction (e.g., toolbox, bench, birdhouse).
  - Maintains integration of emerging technologies (UAVs, GIS, GPS, variable-rate systems).
  - Revised sequencing for improved DOK progression.

- Unit 4 - Oxyfuel and Plasma-Cutting Operations
  - Reorganized from two separate 2022 units (Oxyfuel Cutting and Welding Preparation).
  - Expanded fire safety and cylinder handling procedures. Adds flashback arrestor content and introduces cutting types (straight, bevel, piercing).
  - Strengthened alignment with industry-standard safety and setup procedures.
  - Maintains inclusion of plasma cutting with specific DOK 2-3 performance tasks.
- Unit 5 - Principles of Welding
  - Combines and enhances 2022 welding units with clearer alignment to AWS SENSE Level 1 standards.
  - Includes Shielded Metal Arc (SMAW), Gas Metal Arc (GMAW/MIG), Gas Tungsten Arc (GTAW/TIG), and Flux Core Arc (FCAW).
  - Added lens shade selection, fume extraction safety, and gas cylinder labeling.
  - Expanded weld positions to include flat, horizontal, vertical, and overhead practice.
  - Reinforces weld symbol interpretation, joint types, and CDE competition preparation.
- Unit 6 - Hydraulic and Pneumatic Systems in Agriculture
  - Retains structure from 2022 but expands component analysis (reservoirs, pumps, valves, filters, gauges).
  - Adds hydraulic schematic interpretation and troubleshooting procedures.
  - Updated laboratory applications to include fluid power trainers and digital simulations.
  - Introduces Pascal's and Boyle's laws as theoretical foundations for lab investigation.
- Unit 7 - Electrical Systems Applications in Agriculture
  - Expanded to include AC/DC wiring, relay logic, schematic reading, and circuit building.
  - Strengthened measurement and troubleshooting content using digital multimeters.
  - Added grounding, circuit protection, and wire gauge identification.
  - Now includes three-way switching, receptacle wiring, and lighting installation.
  - Updated DOK 3 project applications (branch circuits and wiring simulations).
- Unit 8 - Principles of Engines
  - Maintains engine disassembly, inspection, and reassembly focus.
  - Expanded comparison of gasoline and diesel systems with lubrication and cooling system analysis.
  - Added fuel mixing calculations, ethanol considerations, and diagnostic testing procedures.
  - Strengthened hands-on performance requirements aligned to small engine repair competencies.
- Unit 9 - Service, Management, and Operation of Agricultural Equipment
  - Combines 2022's Unit 9 and portions of Unit 8 into a comprehensive capstone management unit.

- Expanded preventive maintenance (filters, belts, fluids, electrical systems, hydraulics).
- Adds digital work order creation and cost estimation activities.
- Clarifies operation inspection sequence (pre-start, operation, post-operation).
- Emphasizes safe hitching, driving, and backing procedures with modern agricultural machinery.
- Reinforces industry employability and mechanical problem-solving skills.

## **2026 Diversified Agriculture - Plants Core**

- Document in new curriculum format.
- Competencies and objectives reflect current AFNR standards, CCR alignment, and industry recommendations.
- All items listed below as “Moved,” “Created,” “Revised,” or “Combined” were implemented upon the attending industry representatives’ requests.
- Unit 1 - Leadership and SAE for All
  - Retains leadership and career exploration focus with expanded FFA event alignment: Agronomy, Floriculture, Nursery/Landscape, and Environmental & Natural Resources.
  - Added 21st century skills (communication, collaboration, problem solving, financial literacy, responsibility).
  - Updated employability exercises: résumé development, job applications, interview simulations, and scholarship submissions.
  - Reinforced SAE digital recordkeeping and Immersion SAE categories with AET integration.
- Unit 2 - Safety
  - Elevated from a subtopic to a full, standalone unit emphasizing year-round safety instruction.
  - Clarified OSHA-compliant procedures, PPE expectations, and SDS interpretation.
  - Added fire safety classification, chemical label interpretation, and emergency response protocols.
  - Reinforced requirement for a 100% safety test before lab participation, documented in student records.
- Unit 3 - Plant Anatomy and Physiology
  - Merged and modernized from 2022’s “Plant Growth, Nutrition, and Fertilization.”
  - Added detailed coverage of cellular processes (respiration, photosynthesis, transpiration).
  - Expanded content on sexual and asexual reproduction, USDA climatic zones, and environmental responses.
  - Introduced DOK 3 applications connecting plant structure to crop productivity and propagation methods.
- Unit 4 - Classification
  - Created as a focused new unit on plant identification and taxonomy.

- Emphasizes scientific naming, morphology, and life cycle classification (annual, perennial, deciduous, evergreen).
  - Introduces woody vs. herbaceous and monocot vs. dicot distinctions for horticultural and agronomic contexts.
- Unit 5 - Growing Media
  - Consolidates 2022 growing medium and soil topics.
  - Introduces hydroponic and soilless systems alongside traditional soil management.
  - Expanded on texture, drainage, porosity, and composition factors affecting plant growth.
  - DOK 3 applications include substrate preparation and soil comparison experiments.
- Unit 6 - Environmental Factors
  - Newly added to strengthen connections between plant growth and environmental science.
  - Covers light quality, temperature, humidity, air movement, and water quality (pH, dissolved solids).
  - Integrates sustainability principles and climate adaptation for Mississippi plant systems.
- Unit 7 - Propagation
  - Combines and expands seed and asexual propagation competencies from 2022.
  - Introduces micropropagation and tissue culture to reflect modern biotechnology.
  - Adds risk-benefit analysis of genetically modified plants.
  - Expanded DOK 3 applications through propagation experiments and comparative studies.
- Unit 8 - Plant Nutrition and Fertilization
  - Reorganizes 2022 fertilizer and media content for coherence.
  - Introduces macronutrient/micronutrient deficiency diagnosis through visual and analytical methods.
  - Adds fertilizer calculation exercises, soil pH impact studies, and organic vs. synthetic fertilizer comparisons.
  - Aligns with AFNR PS.03 (Apply principles of plant science to production and management).
- Unit 9 - Planting Techniques
  - New consolidated unit connecting previous crop-specific planting practices.
  - Emphasizes crop selection, preparation, irrigation, fertilization, and harvest sequencing.
  - Integrates horticulture, agronomy, turf, and olericulture within a single applied framework.
- Unit 10 - Greenhouse Management
  - Expanded from the 2022 version with more detailed irrigation, hydroponic, and control system coverage.
  - Introduces urban farming and rooftop garden design.

- Adds hydroponic system construction and management planning (DOK 3).
- Strengthens irrigation scheduling and water source evaluation.
- Unit 11 - Pest Management
  - Retains pest identification and IPM content but expands coverage.
  - Reorganized to include beneficial insects, biological controls, and eco-friendly pesticide use.
  - Adds five-step IPM plan model (identification, prevention, avoidance, monitoring, suppression).
  - Strengthens CDE alignment with Agronomy and Nursery/Landscape.

## **2026 Principles of Agriscience**

- Document in new curriculum format.
- Competencies and objectives reflect current AFNR standards, CCR alignment, and industry recommendations.
- All items listed below as “Moved,” “Created,” “Revised,” or “Combined” were implemented upon the attending industry representatives’ requests.
- Unit 1 - Introduction to Agriscience
  - Updated scope and impact of agriculture to include local, state, national, and global perspectives.
  - Revised to emphasize science and technology applications, biotechnology milestones, and the evolution of precision agriculture.
  - Added GMOs (1996) to the biotechnology timeline and expanded “applications of science” competencies.
  - Reworded objectives to improve clarity and focus on scientific literacy and inquiry.
- Unit 2 - Lab Safety and the Scientific Method
  - Expanded OSHA safety standards and clarified yearlong safety expectations.
  - Strengthened requirement for a written safety test with 100% accuracy, adapted to each school’s facilities and tools.
  - Added accident reporting, chemical labeling, and school-specific customization guidance.
  - Revised “prevent a dangerous explosion” to “prevent accidents,” broadening coverage of laboratory hazards.
  - Reinforced scientific method application with more robust experimental design and data analysis steps.
- Unit 3 - Agricultural Leadership and Career Development
  - Expanded to include the three-circle model (FFA, Classroom/Laboratory, SAE).
  - Added Public Law 116-7 (2019) and Mississippi Junior FFA (1974) to FFA history.
  - Updated membership structure to Active/Student and Alumni/Adult, reflecting the 2026 National FFA model.
  - Expanded leadership and 21st-century skills to include communication, collaboration, financial literacy, and social media professionalism.

- Updated terminology to reflect both CDE and LDE events and enhanced employability skill applications.
- Unit 4 - SAE for All
  - Clarified alignment with the Mississippi Work-Based Learning Teacher Resource Guide.
  - Reinforced that SAE projects are yearlong and distributed across all terms.
  - Updated Foundational and Immersion SAE types with consistent wording (Placement, Ownership, Research, School-Based Enterprise, Service Learning).
  - Added digital recordkeeping expectations and emphasized integration with AET.
- Unit 5 - Agriscience
  - Updated tool list to reflect Mississippi FFA Tool Identification standards.
  - Streamlined to emphasize safe identification and demonstration of precision measuring tools.
  - Removed redundant operational procedures now covered under Safety (Unit 2).
  - Retained emphasis on measurement accuracy and lab instrumentation skills.
- Unit 6 - Soil Science
  - Refined to focus solely on soil properties, formation, and classification.
  - Removed overlapping environmental resource content (now embedded across Division of Agriculture cores).
  - Added USDA Textural Triangle competency and clearer connection to Mississippi soil characteristics.
  - Updated soil horizon and classification tasks with local relevance.
- Unit 7 - Introduction to Cells and Genetics
  - Retains original cellular structure and genetics competencies with clarified DOK levels.
  - Revised homogeneous/heterogeneous terminology for scientific accuracy and inclusion of heredity terminology alignment across Biology CCR standards.
  - Expanded cell and reproduction diagrams to include digital and interactive learning options.
- Unit 8 - Introduction to the Science of Agricultural Plants
  - Strengthened plant physiology and anatomy coverage with diagrammatic and applied tasks.
  - Added local plant identification and ecological relevance.
  - Merged germination and asexual propagation objectives for cohesion.
  - Emphasized hands-on learning through seed dissection, germination trials, and micropropagation labs.
  - Added explicit connection to Floriculture, Agronomy, and Nursery/Landscape FFA CDEs.

- Unit 9 - Introduction to the Science of Agricultural Animals
  - Expanded terminology section to include rabbits and more species diversity.
  - Added companion animals to reflect broader agricultural literacy.
  - Updated fish terminology and replaced catfish-specific content with aquaculture.
  - Enhanced digestive system comparisons and nutrient function applications.
  - Revised breeding process objectives to reflect industry-standard terminology and reproductive technologies.
- Unit 10 - Introduction to Agribusiness and Entrepreneurship
  - Reorganized for clarity and stronger alignment to AFNR CS.01-CS.03 standards.
  - Simplified economic flow explanation with the farm-to-table concept.
  - Removed redundancy with Agribusiness Core curriculum but retained budgeting, assets/liabilities, and business structure comparison.
  - Introduced e-commerce opportunities and challenges.
- Unit 11 - Exploring Mississippi's Agricultural Sectors
  - New unit connecting Principles of Agriscience to all seven Division of Agriculture pathways.
  - Highlights Mississippi's economic sectors including Livestock, Crop, Forestry, Wildlife, Food Science, Ag Tech & Manufacturing, Veterinary, and Communications & Marketing.
  - Incorporates state data sources (USDA NASS, MDAC, MSU Extension). Serves as a transition unit to pathway-specific curricula.

### **2026 Information Technology - Networking**

- Document in new curriculum format.
- Competencies and objectives reflect current standards and industry recommendations.
- This course is replacing the second half of the 2022 Information Technology - Year 2 curriculum.
- Unit 1: Introduces IT career pathways, safety, and digital citizenship with a new focus on AI and prompt engineering, ethics and emerging technology trends.
- Unit 2: Covers network types, topologies, OSI and TCP/IP models, and troubleshooting methods with a deeper focus on practical troubleshooting and SOHO networks.
- Unit 3: Expanded from previous unit to include cabling NICs, rack systems, fiber optics, and networking environment setup.
- Unit 4: New unit that explains switch roles, configuration, and troubleshooting.
- Unit 5: Expanded unit that covers Internet Protocol addressing and router configuration methods, as well as troubleshooting methods for various router applications.
- Unit 6: Combines and expands on previous unit by adding configuration of wireless networks.

- Unit 7: Expands previous unit by adding disaster recovery, vulnerability scanning, and emerging network tools.
- Unit 8: Minor updates to enhance the previous unit.
- Unit 9: New unit that introduces different storage solutions, cloud models, and virtual machines.
- Unit 10: Minor updates to enhance the previous unit, changing verbs to up DOK levels.

## **2026 Lodging, Hospitality, and Tourism**

- Document in new curriculum format.
- Competencies and objectives reflect current standards and industry recommendations.
- All items listed below as "Moved," "Created," or "Revised" in any way, or "Combined" were implemented upon the attending industry representatives' requests.
- Unit 1: Added ongoing safety assessments, clear cell phone policies, and stronger CTSO leadership and service project focus.
- Unit 2: Replaced introductory content with résumé, interview, and etiquette skills. Added math applications. Moved employability to an early program focus.
- Unit 3: Added entrepreneurship, economic impact, and marketing. Expanded lodging and tourism segmentation.
- Unit 4: Added currency exchange, travel documentation, ADA planning, and a hands-on tour project. Emphasized DMOs and Mississippi attractions.
- Unit 5: Strengthened communication, teamwork, and service recovery. Added digital communication and scenario-based practice.
- Unit 6: Expanded security, cybersecurity, and human trafficking content. Added legal duties, green practices, and emergency preparedness.
- Unit 7: Broadened restaurant classifications. Added financial controls, ADA compliance, and truth-in-menu regulations.
- Unit 8: Detailed hygiene, time-temperature, allergens, and sanitation. Aligned with state health certifications.
- Unit 9: Added contracts, permits, and liability planning. Introduced ethical sustainability, career exploration, and vendor collaboration.
- Unit 10: Added a new comprehensive unit reviewing and connecting all major program competencies.
- Unit 11: Added "clubs" category. Expanded coverage of laws, economics, and ethics. Emphasized industry regulations and careers.
- Unit 12: Integrated AI, automation, and mobile apps. Added analysis of tech trends across lodging, F&B, events, and tourism.
- Unit 13: Expanded marketing plans, ROI, segmentation, and ethics. Added sustainability and moved promotions to Unit 14.
- Unit 14: Added a new unit on social media strategy, analytics, engagement metrics, and ethical online behavior.
- Unit 15: Added crisis management, media training, diversity, and compliance. Connected HR to hospitality law.

- Unit 16: Added HACCP, ALERT, and OSHA frameworks. Included student-run safety simulation and emergency preparedness project.
- Unit 17: Deepened study of contamination, pathogens, and food defense. Aligned with ServSafe Manager and FDA standards.
- Unit 18: Moved to final capstone. Added KPIs (RevPAR, ADR), forecasting, and operations-based financial literacy.