

**OFFICE OF CHIEF ACADEMIC OFFICER**  
**Summary of State Board of Education Agenda Items**  
**Consent Agenda**  
**June 18, 2018**

**OFFICE OF CAREER AND TECHNICAL EDUCATION**

- G. Approval to revise selected Mississippi Secondary Curriculum Frameworks in Career and Technical Education for (1) Agricultural and Natural Resources, (2) Digital Media Technology, (3) Engineering Core, (4) Engineering II, (5) Introduction to Agriscience, and (6) Teacher Academy  
(Has cleared the Administrative Procedures Act process without public comments)

**Executive Summary**

The Mississippi Secondary Curriculum Frameworks have a 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 2018-2019 school year.

The following secondary curriculum frameworks are recommended for approval:

1. Agricultural and Natural Resources
2. Digital Media Technology
3. Engineering Core
4. Engineering II
5. Introduction to Agriscience
6. Teacher Academy

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 summaries of the curriculum framework revisions.

Recommendation: Approval

Back-up material attached

## **Summary of Secondary Curricula Changes for Career & Technical Education for 2018**

### **Agriculture and Natural Resources**

- Aligned curriculum with 2018 Mississippi College and Career Ready Standards (MS CCRS) for Science
- Revised Unit 2 Leadership and Human Rights to Agricultural Leadership and Career Development
- Developed an Ag Small Engine Unit (Unit 8)
- Decreased Year 1 hours from 210 to 200 and Year 2 hours increased from 210 to 220
- Outlined more specific content to be covered and assessed within each unit

### **Digital Media Technology**

- Revised Competencies and Objectives in Units 1, 4, and 5
- Changed from Unit 6 content was Media Rich Content Design to Preparing Portfolios
- Renamed Unit 8 to Preparing to Edit Video Production
- Combined Units 9, 10, and 11

### **Engineering Core**

- Added Student Organization section to introductory unit
- Moved Ethics and Safety sections to Unit 2
- Aligned with National Assessment of Educational Progress' Technology and Engineering Literacy Framework, National Society of Professional Engineers Code of Ethics, NASA BEST Engineering Design Process, OSHA 10-hour General Industry Guidelines, Institute of Electrical and Electronics Engineers Symbols, Materials Safety Data Sheet (MSDS), and Lockout/Tagout
- Combined Careers section into one unit to include Engineering Technology (ET)
- Combined Technical Writing section with history and technology
- Revised objectives to reflect similar language of the National Research Council's Framework for K-12 Science Education
- Added specificity to objectives in terms of content
- Added optional enrichment competencies to some objectives

### **Engineering II**

- Added Safety Review component to beginning of course
- Aligned with National Assessment of Educational Progress' Technology and Engineering Literacy Framework, National Society of Professional Engineers Code of Ethics, NASA BEST Engineering Design Process, OSHA 10-hour General Industry Guidelines, Institute of Electrical and Electronics Engineers Symbols, Materials Safety Data Sheet (MSDS), and Lockout/Tagout
- Added detailed CAD section leading to option of 3D drafting certification
- Integrated Mechanical Unit into Robotics and Manufacturing Systems

- Revised objectives to reflect similar language of the National Research Council's Framework for K-12 Science Education
- Added specificity to objectives in terms of content
- Added optional enrichment competencies to some objectives
- Added Capstone Unit with optional Maker Movement enrichment elements

### **Introduction to Agriscience**

- Aligned curriculum with 2018 Mississippi College and Career Ready Standards (MS CCRS) for Science
- Revised objectives to reflect similar language of the National Research Council's Framework for K-12 Science Education
- Added specificity to objectives in terms of content
- Developed Unit 5 Tools in Agriculture
- Moved Unit 5 Mechanical Technologies in Agriscience to Unit 12
- Adjusted unit hours between units, total hours remain 109

### **Teacher Academy**

- Aligned units for improved sequence of content
- Aligned to academic content standards
- Aligned to content for possible Dual Credit/Dual Enrollment opportunities
- Added content to address special populations of students (Special Education students, struggling students, etc.)
- Incorporated Code of Ethics into curriculum content

The back-up for Tab G is a large document so it is on the Career and Technical Education (CTE) web page for you to review if you would like. Below is the link to the CTE back-up materials.

“June 2018 Board Meeting Items” hyperlink is:

<http://www.mde.k12.ms.us/ESE/secondary-education/june-2018-board-meeting-items>