

MS-CPAS Blueprint Summary

Assessment: Agricultural Mechanics Technology
Test Code: 20101Y0-2007
CIP Code: 010201
Course Codes:
Type: PS

The MS-CPAS Blueprint Summary indicates the number of assessment questions related to each unit on the assessment and indicates the relative emphasis placed on each unit. All of the listed competencies will appear on the assessment, but because of the length of the assessment, not every competency will be equally represented in the assessment.

The MS-CPAS Blueprint Summary includes a variety of information, which is explained below:

Term and Definition	
Assessment:	This signifies the name of the assessment, which corresponds with the name of the pathway or program.
CIP Code:	Developed by the U.S. Department of Education's National Center for Education Statistics (NCES), CIP codes are a federal coding system utilized for assessment and reporting of fields of study and program completions activity tracking.
Test Code:	A unique code that serves to numerically identify a specific assessment
DOK Levels:	Based on Webb's Depth of Knowledge (DOK), this signifies the assessment item difficulty factor to be expected in each unit. The three levels are as follows: <i>1 = Recall and Reproduction, 2 = Skills and Concepts, 3 = Short-term Strategic Thinking</i> Some postsecondary programs will not use DOK levels until the next revision.
Instructional Hours:	The total number of hours assigned to a unit per the pathway's curriculum
Total Items:	The total number of items assigned to each unit on the assessment. It is calculated as follows: <i>(Unit Instructional Hours / Total Instructional Hours) * Total Active Items</i>
Active Items:	The number of items on the assessment that will be graded
Field-test Items:	The number of items that are being field-tested, or piloted, to determine their eligibility for inclusion as an Active Item on future assessments. These items are not graded and, thus, will not impact the student's final score.
Total Assessed Items:	The total number of items on the given assessment. It is calculated as follows: <i>Active Items + Field-test Items</i>

For more information regarding this MS-CPAS Blueprint Summary, please contact the Research and Curriculum Unit by phone at 1.866.901.7433 or by e-mail at helpdesk@rcu.msstate.edu.

Assessment: Agricultural Mechanics Technology				
Test Code: 20101Y0-2007				
CIP Code: 010201				
Total Hours: 18				
	DOK Level(s)	Instructional Hours	Total Items	
AMT 1123: Agricultural Mechanics Fundamentals		3	12	
1. Explain safety rules for shop activity. 2. Explain procedures for identifying, storing, and disposing of hazardous materials. 3. Explain the use of the Materials Safety Data Sheet (MSDS) form. 4. Explain procedures for applying fire safety in the agricultural mechanics shop. 5. Explain the requirements and working conditions for employment in the agricultural mechanics industry. 6. Use technical media in agricultural mechanics. 7. Identify fasteners and hardware used in agricultural mechanics. 8. Identify special tools and test instruments for use in agricultural mechanics.				
AMT 1223: Advanced Electrical/Electronics Systems		3	12	
1. Explain the functions of the components of the cranking and charging systems. 2. Demonstrate troubleshooting procedures for the electrical system. 3. Describe the use of microprocessors and other electronic devices in equipment electrical systems				
AMT 1313: Basic Power Trains		3	11	
1. Demonstrate machines used for transmitting power in agricultural equipment. 2. Explain the elements of differential and axle assemblies. 3. Demonstrate methods of power transmission and braking.				
AMT 1423: Advanced Engines		3	11	
1. Service the fuel system in internal combustion engines. 2. Explain the function of the lubrication system. 3. Explain the function of the cooling system. 4. Explain the function of the air intake system. 5. Explain the function of the exhaust system. 6. Disassemble, analyze components, and assemble an engine.				
AMT 1511: Principles of Air Conditioning		3	11	
1. Describe the principles of refrigeration. 2. Perform preventative maintenance on air conditioning systems. 3. Service an air conditioning system.				
AMT 1613: Basic Hydraulic Systems		3	12	
1. Explain the physical laws of hydraulics. 2. Identify types of hydraulic pumps. 3. Identify and describe the functions of hydraulic control valves. 4. Identify and describe the functions of hydraulic actuators. 5. Explain the functions of hydraulic systems.				
AMT 2813: Compact Engines and Equipment		3	11	
1. Identify safety procedures used on compact equipment. 2. Inspect, troubleshoot, and service compact equipment. 3. Troubleshoot and repair major component parts of compact equipment.				
			Active Items	80
			Field-Test Items	20
			TOTAL ASSESSED ITEMS	100