

SEC – Automotive Service Technician Blueprints

This document contains the blueprints for the concentration areas in secondary Automotive Service Technician.

Course Code(s)	Test Code	Program Name	Supplemental Materials/Notes
997000, 997002, 997003	11611Y1-2014	Automotive Service Technician	
997001, 997004, 997005	11611N2-2014	Automotive Service Technician	

Technical Skills Attainment 2021-2022		
Curriculum	Y1 Post-Test	Y2 Post-Test
Automotive Service Technician	MS-CPAS*	National Certification* Testing information can be found using the link below: <div style="border: 1px solid black; padding: 2px; display: inline-block;">Automobile Certification: Maintenance & Light Repair assessment (ASE)</div>

<https://www.ase.com/entry-level/>

* These assessments are subject to change based on funding and policy changes/updates. Information for test coordinators will be disseminated on the ordering process for the national certification by the Research and Curriculum Unit at Mississippi State University.

MS-CPAS Blueprint Summary

Assessment:	Automotive Service Technician
Test Code:	11611Y1-2014
CIP Code:	470604
Course Codes:	997000, 997002, 997003
Type:	CP

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:

Terms and Definitions	
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	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: Automotive Service Technician						
Test Code: 11611Y1-2014				DOK Level(s)	Instructional Hours	Total Items
CIP Code: 470604						
Total Hours: 200						
Unit 1: Automotive Shop Operations	1	2	3		30	12
1-5 Not on MS-CPAS						
6. Identify and describe general safety rules, components of an automobile, tools/equipment, measurement practices, and fasteners for working in a shop/lab and industry.						
7. Identify and apply concepts regarding safety procedures and practices in and around automotive operations.						
8. Explore general shop operations and safety.						
Unit 2: Engine Repair		2			60	24
1. Identify and describe general vehicle information and repairs.						
2. Identify and describe the major systems and components of an automobile.						
3. Inspect, adjust, and/or repair cylinder head and valve train timing.						
4. Inspect, replace, and adjust lubrication and cooling systems.						
5. Inspect and perform general maintenance (lubrication, oils, and fluids).						
Unit 3: Manual and Automotive Transmission		2			40	16
1. Identify, inspect, and perform general maintenance and repair of automatic transmissions, transaxles and related components.						
2. Identify, inspect, and perform general maintenance and repair of Manual Drive Trains, axles, transfer cases, and related components.						
Unit 4: Basic Electrical/Electronic Systems			3		70	28
1. Explore general electrical/electronic systems and theories of operation.						
2. Apply concepts of battery systems by performing inspection, diagnosis, and repair, if needed.						
3. Apply concepts of starting systems by performing inspection, diagnosis, and repair, if needed.						
4. Apply concepts of charging systems by performing inspection, diagnosis, and repair, if needed.						
Unit 5: Not tested on MS-CPAS						
					Active Items	80
					Field Test Items	20
					TOTAL ASSESSED ITEMS	100