

UAS Flex Course

<i>RBT</i>	<i>Weight</i>	<i>Objectives / Indicators</i>
INTRODUCTION TO UAS		
B2	9%	101. Introduction to UAS and UAS Regulations.
B2	2%	101.01 Define and categorize basic UAS types.
B2	2%	101.02 Explain what personal harm and property damage could result from inappropriate use.
B2	2%	101.03 Demonstrate basic understanding of restrictions on UAS flights.
B2	3%	101.04 Describe appropriate and inappropriate locations and conditions for safe operations.
UAS COMPONENTS AND TROUBLESHOOTING		
B2	6%	102. Understand Propulsion and Power.
B2	3%	102.01 Compare the two types of propulsion.
B2	3%	102.02 Describe the function and types of common batteries used in UAS.
B2	5%	103. Understand Types of Control.
B2	3%	103.01 Classify the various levels of operator vs. computer control.
B2	2%	103.02 Classify communication methods.
B2	7%	104. Understand Core Components.
A1	4%	104.01 Identify the core components used in UAS.
B2	3%	104.02 Select appropriate UAS components.
C3	5%	105. Perform UAS Assembly.
A1	2%	105.01 Identify tools and equipment for assembly.
C3	3%	105.02 Install and configure common payload types.
C3	8%	106. Execute Troubleshooting.
C3	2%	106.01 Establish a troubleshooting theory.
C3	6%	106.02 Apply a theory to solve common UAS hardware, software and communication problems.
UAS FLIGHT OPERATIONS		
C3	7%	107. Execute Pre-Flight Operations.
A1	3%	107.01 Identify the components of a pre-flight checklist.
C3	4%	107.02 Execute a pre-flight check.
C3	10%	108. Execute In-Flight Operations.
B2	3%	108.01 Describe the roles of a UAS flight team.
B2	3%	108.02 Understand the stages of flight: takeoff, flight, and landing.



UNMANNED AERIAL SYSTEMS

Curriculum Framework

C3	4%	108.03 Execute appropriate responses to specific in-flight scenarios.
C3	4%	109. Execute Post-Flight Operations.
A1	2%	109.01 Identify the components of a post-flight checklist.
C3	2%	109.02 Execute a post-flight check.
INDUSTRY-SPECIFIC APPLICATIONS		
B2	9%	110. Execute Advanced Operation.
C3	3%	110.01 Select appropriate platform for a specific mission.
C3	6%	110.02 Configure flight plan using appropriate software.
C3	30%	111. Apply Industry-Specific UAS Applications.
B2	7%	111.01 Examine current and future industry applications of UAS.
B2	8%	111.02 Describe how purpose impacts design.
C3	15%	111.03 Develop a UAS solution for a given industry-specific scenario.