



# EMPLOYABILITY PROFILE

## Remotely Piloted Aircraft Systems

### Industry-Based Skill Standards

#### Proficiency Definitions

NA = Not Applicable

1 = Developing

2 = Basic

3 = Proficient

4 = Mastery

	9th	10th	11th	12th		9th	10th	11th	12th
<b>Career Awareness of the RPAS Industry</b>					<b>Reading and Interpreting Flight Maps</b>				
Understands RPAS applications and related technology. Identifies various careers related to Drone/RPAS technology, required education/ training, and additional potential career opportunities related to the field of study					Understands the notations commonly used on air maps, can extract relevant information. Can plan a route between given points on a map using latitude and longitude to identify of map locations.				
<b>RPAS Safety and Operations</b>					<b>Video and Photography using RPASs</b>				
Understands the laws relating to safety and operations of RPAS in the United States defined by the FAA. Demonstrates safe working habits when operating RPAS equipment follows safe practices when testing RPAS performance and handling					Understands the various formats that are commonly used with photos and videos captured with RPASs. Can edit photo or video content as needed using Adobe Photoshop processes including chroma key, key frames, and scale/rotation				
<b>Physics of Flight</b>					<b>Airport Operations and Airspace</b>				
Demonstrates an understanding of the physics related to flying devices. understands what affects aircraft performance, PIC performance, and the environmental and human factors that affect aircraft performance.					Understands airport and airspace classifications and restrictions in relation to RPAS operations. Can read and interpret air charts to determine restrictions and landmarks, can explain airport flight patterns				
<b>Applications</b>					<b>FAA Rules and Regulations</b>				
Identifies applications and related technology of RPAS in various industry settings, seeks and interprets information on the changing uses for RPAS.					Understands the role of the FAA as it governs RPAS, explains FAA regulations and classifications of Airspace. Can explain operational requirements within FAA controlled Airspace and decipher Notices to Airmen (NOTAMs)				
<b>RPAS Current Events</b>					<b>Electromechanical</b>				
Seeks and interprets information on the changing applications and uses for RPAS in whatever careers they are appearing.					Identifies and explains the function of various components are used in an RPAS Demonstrates an understanding of how the mechanical components are controlled and how they interact in both fixed wing and multi-copter applications				
<b>Tools and Equipment</b>					<b>Geographic Information Systems (GIS)</b>				
Identifies and demonstrates the correct techniques for using tools and equipment. Uses electronic diagnostic equipment accurately and effectively. Demonstrates appropriate tool and equipment safety procedures.					Demonstrates the understanding of GIS is used in relation to RPAS flight. Can create accurate maps to communicate information using data and aerial imagery obtained through GIS applications.				
<b>Weather</b>					<b>RPAS Applications in Agriculture</b>				
Demonstrates an understanding of weather patterns and their development, and where to obtain weather information. Makes informed choices about flight based on current and predicted weather.					Understands how RPAS is used in agriculture, the advantages of precision agriculture, and the impact use of RPAS can have for farmers. Can explain the techniques used with RPAS that lead to improved productivity.				
<b>Pilot Alerts</b>					<b>RPAS Applications in Insurance and Inspections</b>				
Demonstrates the ability to interpret METARs (Meteorological Aerodrome Report), TAFs (Terminal Aerodrome Forecast), and NOTAMS (Notice to Airmen). Makes decisions for flight planning based on information obtained.					Can explain the benefits of using RPAS for insurance and building inspections, understands the impact RPAS can have on the costs of inspections for both indoor and outdoor scenarios. Can develop a proposal for RPAS inspections.				
<b>Crew Resource Management</b>					<b>RPAS Applications in Emergency Services</b>				
Demonstrates an understanding of crew resource management in flight operations. Can define the various roles and responsibilities and how drugs, emotion, and human physiology impact individuals' abilities to make good decisions					Understands the various applications of RPAS in emergency situations. Can explain what laws dictate when and how a RPAS can be used for emergencies situations. Research how RPAS can enhance emergency responder effectiveness.				



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WORK-BASED LEARNING			POSTSECONDARY CREDIT				
Type of WBL Experience	Year	Hours	College Course	Possible Cr.	Attained		
			SUNY MVCC UA 120	3		Y	N
			SUNY MVCC UA 215	3		Y	N
			SUNY MVCC UA 265	3		Y	N
			SUNY MVCC UA 267	3		Y	N
			SUNY OCC ENG 103	3		Y	N
			SUNY OCC ENG 104	3		Y	N
			SUNY OCC MAT 118	3		Y	N
			SUNY MVCC GE 101	3		Y	N
			SUNY MVCC CT 266	3		Y	N
			SUNY MVCC UA 102	3		Y	N
			<b>Technical Assessment</b>		<b>Passed</b>		
			Written: FAA Part 107 The National Institute of Standards and Technology: Standard Test Methods for Small Unmanned Aircraft Systems	Y		N	
			Performance: FAA Part 107 The National Institute of Standards and Technology: Standard Test Methods for Small Unmanned Aircraft Systems	Y		N	
			Portfolio	Y		N	
			<b>CERTIFICATIONS, ENDORSEMENTS, LICENSES</b>				
			<b>Title</b>	<b>Date Obtained</b>			
			Recreational UAS Safety Test (TRUST)				
			FEMA				
			IS-00240.b Leadership and Influence				
			IS-00454 Fundamentals of Risk Management				
			IS-00241.b Decision Making and Problem Solving				
<b>TOTAL</b>			FAA Part 107 certificate				

AWARDS, SPECIAL RECOGNITION, SCHOLARSHIPS	DIPLOMA	Date Obtained	
	Diploma Earned: Insert diploma type here		
	Technical Endorsement on Diploma?	Y	N