

2018

sUAS Training Resources; First Edition

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Abstract

This is the beginnings of a master-list that represents the AGIC sUAS Work Groups' collective knowledge of available educational resources, professional development and credentialing that relates to sUAS or the sciences surrounding it.

Pilot Knowledge

The importance of possessing real, time-tested pilot knowledge and skills will increase your success rate for missions. During the FAA waiver process, your likelihood of gaining approval increases dramatically if you effectively communicate a command of this knowledge through the associated aviation vocabulary.

Aeronautical Information Manual

https://www.faa.gov/air_traffic/publications/media/AIM_Basic_dtd_10-12-17.pdf

Pilot's Handbook of Aeronautical Knowledge

https://www.faa.gov/regulations_policies/handbooks_manuals/aviation/phak/

FAA WINGS pilot proficiency program

https://www.faasafety.gov/WINGS/pub/learn_more.aspx

Part 107 Resources:

<https://forum.dji.com/thread-90806-1-1.html>

Professional Certifications

Certification through trusted and respected third parties is an excellent way to showcase time spent in your career and highlight your skillsets. The study materials recommended for these certifications is often of high quality, so pursuit of these certifications as a means of learning or acquiring new knowledge is a viable strategy.

ASPRS

Intro to program

<https://www.asprs.org/certification-program/introduction-to-asprs-certification-program>

Certification Exam Matrices

<https://www.asprs.org/asprs-certification-program/certification-examination-matrices>

Reference materials suggest by ASPRS for their certifications:

General Reference Materials*

- Remote Sensing and Image Interpretation - 7th edition, Lillesand and Kiefer 2015 •
- Elements of Photogrammetry 4th edition: With Applications in GIS, Wolf, Dewitt and Wilkerson, 2014 •
- Manual of Photogrammetry, 6th edition, J. Chris McGlone, editor, ASPRS, 2013
- Manual of Geographic Information Systems, Marguerite Madden, editor, ASPRS, 2009
- Manual of Airborne Topographic Lidar, Michael S. Renslow, editor, ASPRS, 2015
- Glossary of Mapping Sciences, Stephen DeLoach, editor, ASPRS, 1994
- Fundamentals of Remote Sensing and Airphoto Interpretation, Avery & Berlin, 5th edition, 1992

*These are suggested references, not authoritative sources for all exam questions

UAS Reference Materials*

- Introduction to the Unmanned Aircraft Systems, edited by Richard K. Barnhart, Stephen B. Hottman, Douglas M. Marshall J.D., Eric Shappee.
- Introduction to UAV Systems (Aerospace Series) 4th edition, By Paul G. Fahlstrom, Thomas J. Gleason. 2012, Wiley, John & Sons, Incorporated

*These are suggested references, not authoritative sources for all exam questions

NSPS CST

National Society of Professional Surveyors, Certified Survey Technician, Level 1-4
Spearheaded and maintained by the NSPS

<http://www.learnst.com/>

AUVSI TOP Operator

Landing page

<https://www.auvsi.org/topoperator>

Certifying bodies

<https://www.auvsi.org/find-certifying-body>

Training providers

<https://www.auvsi.org/find-top-training-provider>

Universities

ASU

Aeronautical Management Technology (unmanned aerial systems)-

<https://poly.engineering.asu.edu/aviation/unmanned-aerial-systems-bs/>

<https://webapp4.asu.edu/programs/t5/majorinfo/ASU00/TSAMTUASBS/undergrad/false>

Unmanned Vehicle University

www.uxvuniversity.com

-Coursework & Certificates-

General Pilot Training

Aerial Cinematography Training

UAV moving vehicle Operations

UAV Thermal Infrared Operations Certificate

Professional Certificate in Unmanned Aircraft Systems Project Management

-Degreed Programs-

Masters Degree in Unmanned Systems Engineering

Doctorate Degree in Unmanned Systems Engineering

Yavapai College

AAS in Unmanned Systems

<https://www.yc.edu/v5content/pathways/auxillary/aviation/uas.htm>

AAS Unmanned systems coursework

<<UASprogram.pdf>>

2018-2019 Catalog

AAS Aerospace science (plane/heli/UAS)

http://catalog.yc.edu/preview_program.php?catoid=13&poid=2731&returnto=1206

Embry Riddle-Prescott

BS in Unmanned Aircraft Systems

<https://erau.edu/degrees/bachelor/unmanned-aircraft-systems/>

Minor in Unmanned Aircraft Systems

<https://catalog.erau.edu/prescott/academic-programs/minors/unmanned-aircraft-systems/>

Embry Riddle-Worldwide

--Professional Development--

Professional Program in Small Unmanned Aircraft Systems (sUAS)

<https://proed.erau.edu/programs/small-unmanned-aircraft-systems/>

SUAS-1500 Fundamentals for Starting an sUAS Small Business

<https://proed.erau.edu/courses/fundamentals-for-starting-an-suas-small-business/>

SUAS-1300 Global Unmanned Aircraft Systems Risk Management

<https://proed.erau.edu/courses/global-unmanned-aircraft-systems-risk-management/>

SUAS-3000 SUAS Fundamentals for Public Safety

<https://proed.erau.edu/courses/suas-fundamentals-for-public-safety/>

SUAS-2000 SUAS Ground School

<https://proed.erau.edu/courses/suas-ground-school/>

SUAS-1400 SUAS Inspection Course

<https://proed.erau.edu/courses/suas-inspection/>

sUAS for Public Safety Certificate

<https://proed.erau.edu/programs/suas-for-public-safety/>

--Degreed Programs--

Master of Science:

Unmanned & Autonomous Systems Engineering

<https://erau.edu/degrees/master/unmanned-autonomous-systems-engineering/>

Master of Science:

Unmanned Systems

<https://erau.edu/degrees/master/unmanned-systems/>

Bachelor of Science:

Unmanned Systems Applications

<https://erau.edu/degrees/bachelor/unmanned-systems-applications/>

Hidden Gems

ASURE gives demonstrations out to those “in the know”. How do we get in the know?

Sheriff's Office + Maricopa Risk Management seminars (more to come)

Maricopa County Flood District Seminars (Joe Wagner)

Conferences

AGIC sUAS Workshop!

Aerospace Arizona Summit

AUVSI Xponential