

# An ASC Workshop on Drones for Construction Education

Bringing Drone Technology to the Construction Management Classroom

### Wednesday, April 20th, 2022, 1-4 PM Caddell Building @ Georgia Tech

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### Abstract:

Drone adoption in the construction industry has significantly increased over the last few years for various types of applications, from site surveying and mapping and progress monitoring to building inspection, safety monitoring, and structures maintenance. To better equip construction students for the increasing demand for drone use on construction job sites, educators need to integrate this technology into their curriculum. The goal of this hands-on workshop is to demonstrate how drone technology can be incorporated into a construction management curriculum. First, the current status of drone use in the construction industry will be discussed and the benefits, challenges, and safety considerations of such integration will be reviewed. Then a hands-on demonstration of drone flight, data collection, and analysis will be provided and various hardware and software tools will be introduced that can be incorporated into a construction management curriculum. Finally, the workshop will allow for discussion among programs that are already using drones and provide an opportunity to share experiences, best practices, and new perspectives.

#### Learning Objectives:

- Understand drone technology and its technical requirements and considerations for successful integration into the construction curriculum.
- Illustrate and discuss potential course activities on drones for construction, from drone flight to data collection and analysis.
- Demonstrate and discuss various hardware and software tools for drone flight, data collection, and analysis.
- Discuss and analyze best practices of drone integration in the construction curriculum.

## Activities:

- 1. Introduction to drone applications in construction, and their benefits, challenges, and safety considerations.
- 2. Demonstration of drone flight, data collection, and analysis using various hardware and software tools.
- 3. Open discussion on experiences, best practices, and new perspectives about using drones for construction education.

This workshop is a part of <u>58th Annual ASC International Conference</u> Pre-Conference Workshops!