



TEXAS A&M UNIVERSITY
SAN ANTONIO

COLLEGE OF BUSINESS

Fire and Emergency Services Administration Program

FESA 4368 Introduction to Unmanned Aerial Vehicles

August 25 – December 12, 2025

A. MAJOR COURSE DESCRIPTION/REQUIREMENT

A first course in unmanned aerial vehicles (UAVs), aka “drones”, and the technologies involved in their operation. Coverage includes UAV components, command and control (C2) communication systems, basics of flight, regulatory agencies and regulations, safety and societal considerations.

B. LEARNING OUTCOMES

1. Recognize and describe the role of unmanned aerial vehicles (UAVs) in past, present, and Future society
2. Comprehend and explain various components of UAVs
3. Comprehend and explain basics of flight and flight control systems
4. Understand and describe basic regulations applicable to UAV flight
5. Determine and comprehend the use of drones in emergency operations.

C. LECTURE OR DISCUSSION TOPICS

- A. definitions
- B. history of UAVs
- C. classifications of UAVs
- D. contemporary applications
- E. societal impact and future outlook
- F. operational considerations
- G. Rules and regulations

D. REQUIRED OR RECOMMENDED READINGS

None

Course readings and other materials will be assigned by the instructor