



BBCC Unmanned & Mechatronics Programs

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Unmanned Program Coordinator

What need are we serving?

Unmanned aircraft are a relatively new technology in the civilian world, with their roots in remote control (RC) as a hobby and military unmanned systems.

Many industries are recognizing the benefits of the cheap aerial data that unmanned aircraft provide.

Industries are looking for people with **traditional industry skills**, but who can **also operate the company 'drone'**.

The biggest industry growth is coming from agriculture (mainly research and ag service provision), construction, inspection services, emergency management, resource management, law enforcement.

Over 100 000 jobs are expected to be created by 2025 (AUVSI, 2013)

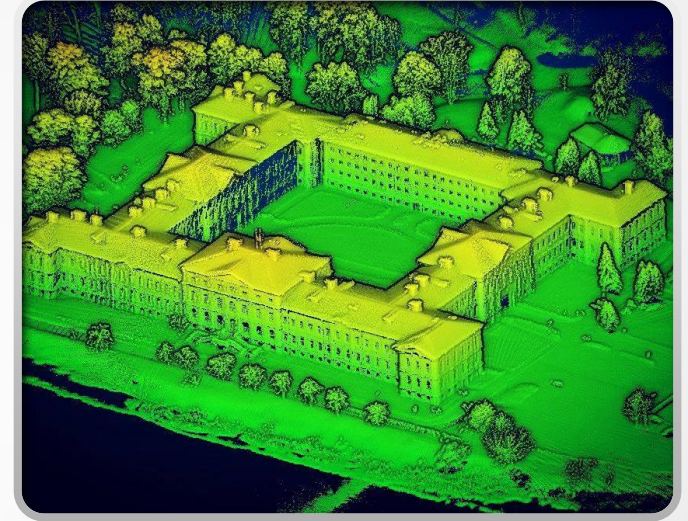
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It is **not enough** to just be a 'good drone pilot'. You have to know how to operate as a professional (safely and within the law), and **collect usable data**.

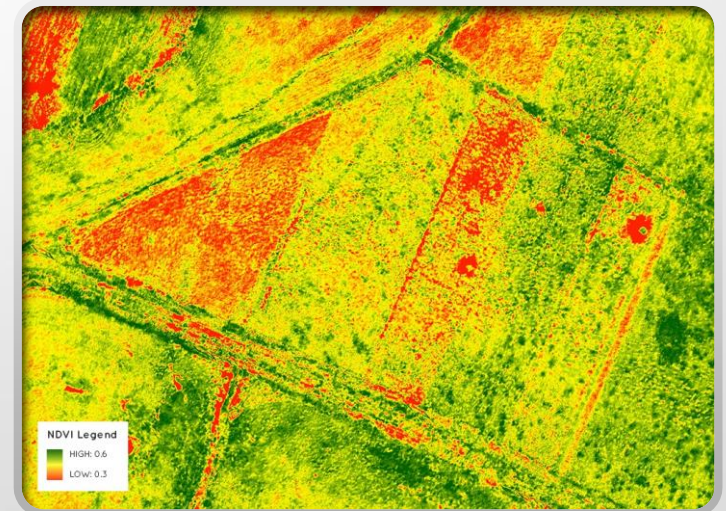
Unmanned Aircraft can be used to make maps, conduct surveys, build 3D models of building and landscapes, create elevation models, conduct crop health assessment.....**but only if you know how to collect the relevant data!**

Manufacturing is becoming more and more mechanized, electronic and **automated**, and it is becoming much more important to know how manufacturing systems work.

- UAS with LiDAR system



- UAS NDVI system



Program Info

- Federal Title V Grant
- 5 Year grant, now in year 2.
- Degrees and Certificates
- **Unmanned Aerial Systems (UAS) Technical Management Associate of Applied Science (AAS) Degree** (90 credits)
Includes most courses from both certificates in addition to robotics and programming
- **Mechatronics Certificate of Achievement** (49 credits)
This certificate is fully stackable and included in the AAS degree
- **Unmanned Aerial Systems (UAS) Remote Pilot Certificate of Accomplishment** (28 credits)
Six key courses that provide you the professional knowledge and skills to use sUAS commercially



Staff

Grant Director: Dr. Pat Ford

Program Assistant: Laura Goodall

Advising: Rafael Villalobos

Mechatronics: Gary Baker

Unmanned Systems: Byron Noel