

Aug 14th, 1:00 PM - 2:30 PM

Gaetz Aerospace Institute – Embry-Riddle Aeronautical University's High School Dual Enrollment Program

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Preparing Students for Emerging Industries in Aviation, Unmanned Systems and Aerospace Engineering – a concurrent enrollment model



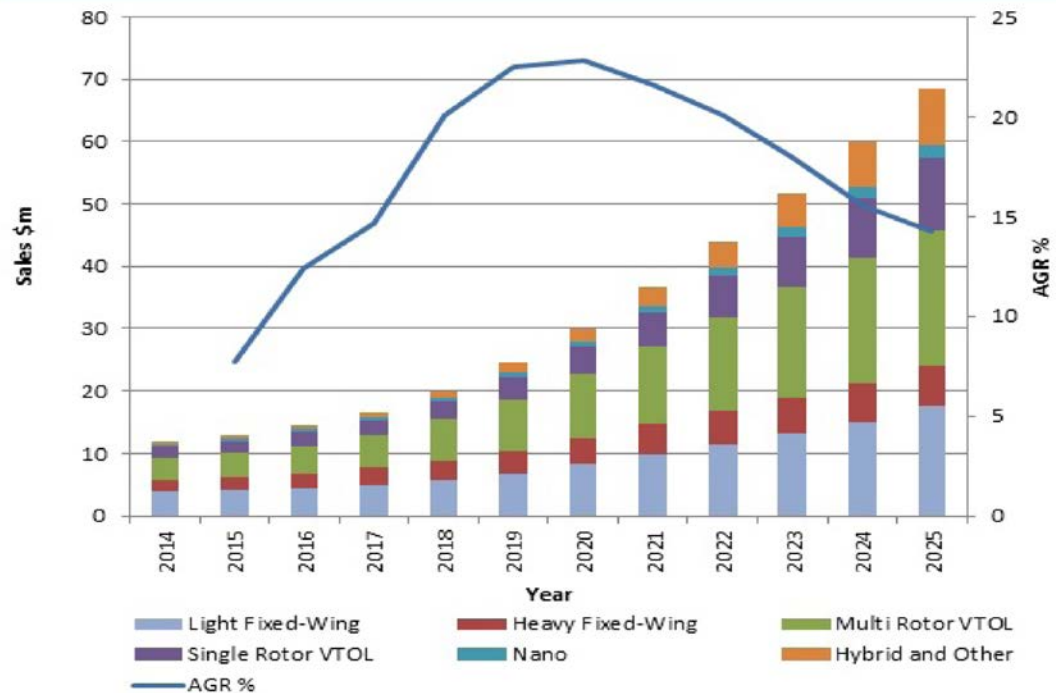
Market Demands – A different kind of pilot

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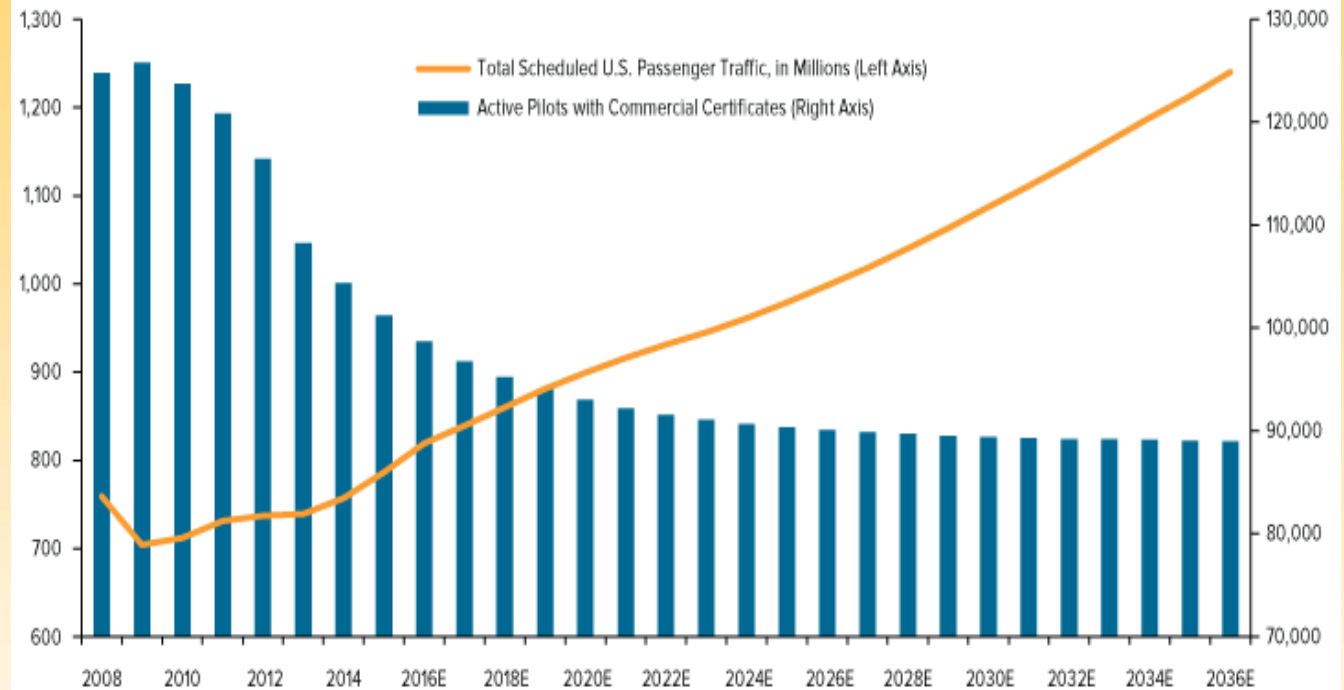
Remote

Figure 6.141 Canadian Small UAV Agriculture & Agri-Business Applications Sales Forecast by Design Category 2015-2025 (\$m, Model Design/Type, AGR%)



Manned

Number of Active Pilots Estimated to Drop as Number of Domestic and International Passengers Rise



Source: FAA Aerospace Forecast Report 2016-2036, U.S. Global Investors



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Unmanned
Aerial
Systems – A
disruptive
technology

Current global market for **UNMANNED AIRCRAFT SYSTEMS (UAS):**
\$11.3 BILLION

IN 10 YEARS, the UAS global market will total
\$140 BILLION



After UAS become a part of **US AIRSPACE,** the economic impact will total
\$13.6 BILLION WITHIN THREE YEARS

Between **2015 AND 2025,** UAS in the US will be
\$82.1 BILLION

Source: Association for Unmanned Vehicle Systems International

BUSINESS INSIDER



GAETZ AEROSPACE INSTITUTE

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Our Mission

To provide our high school students with a clear pathway for an accelerated college degree and an exciting career in the aerospace industry



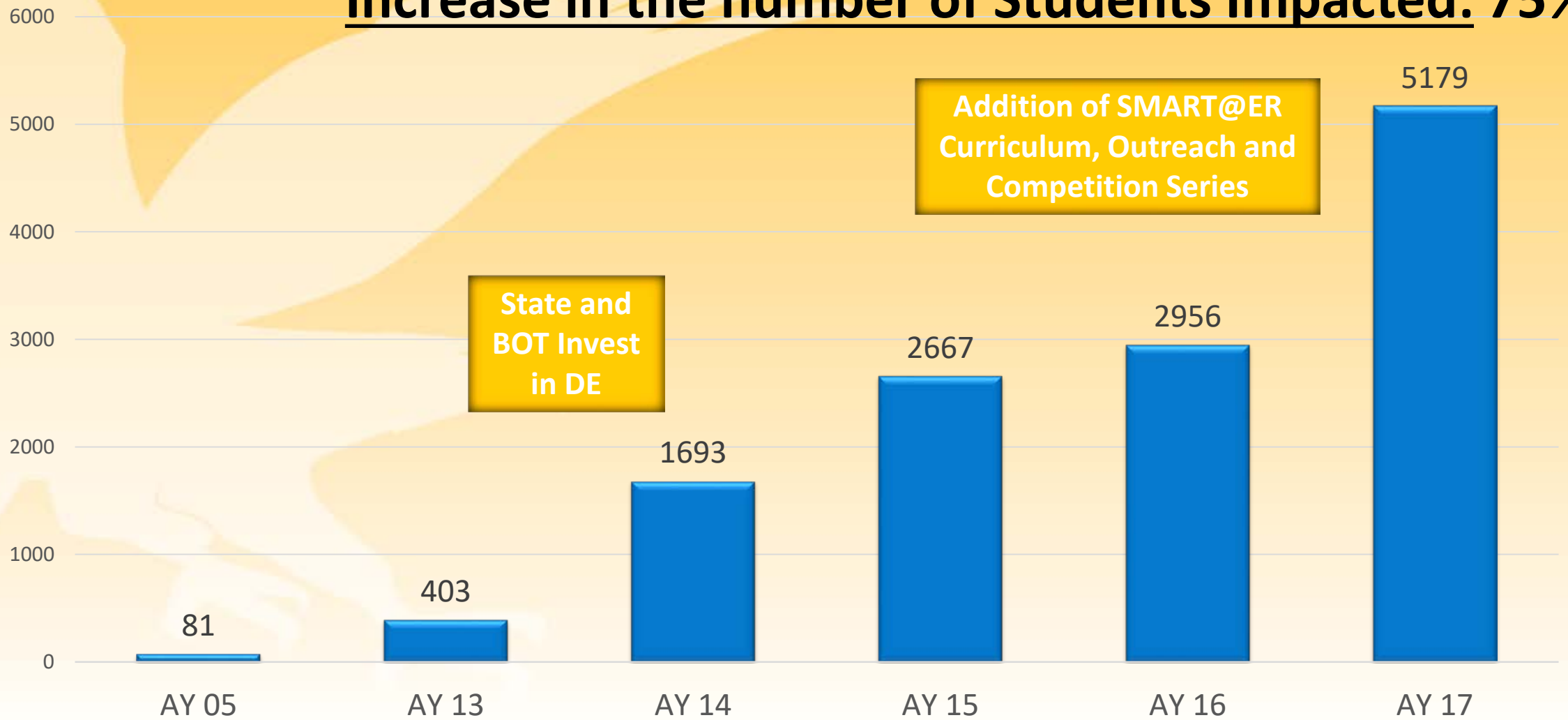


Overall Students Impacted

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Increase in the number of Students Impacted: 75% ↑

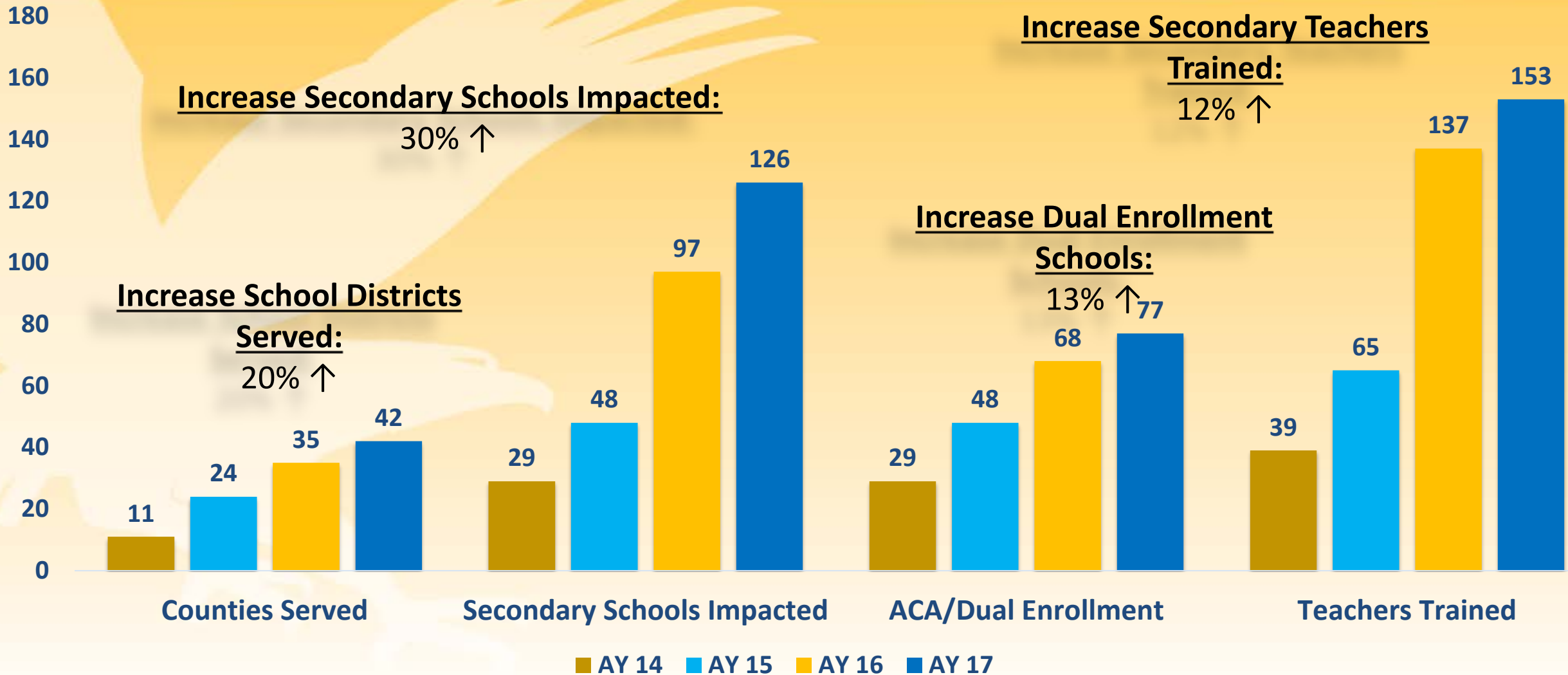




Vertical Growth

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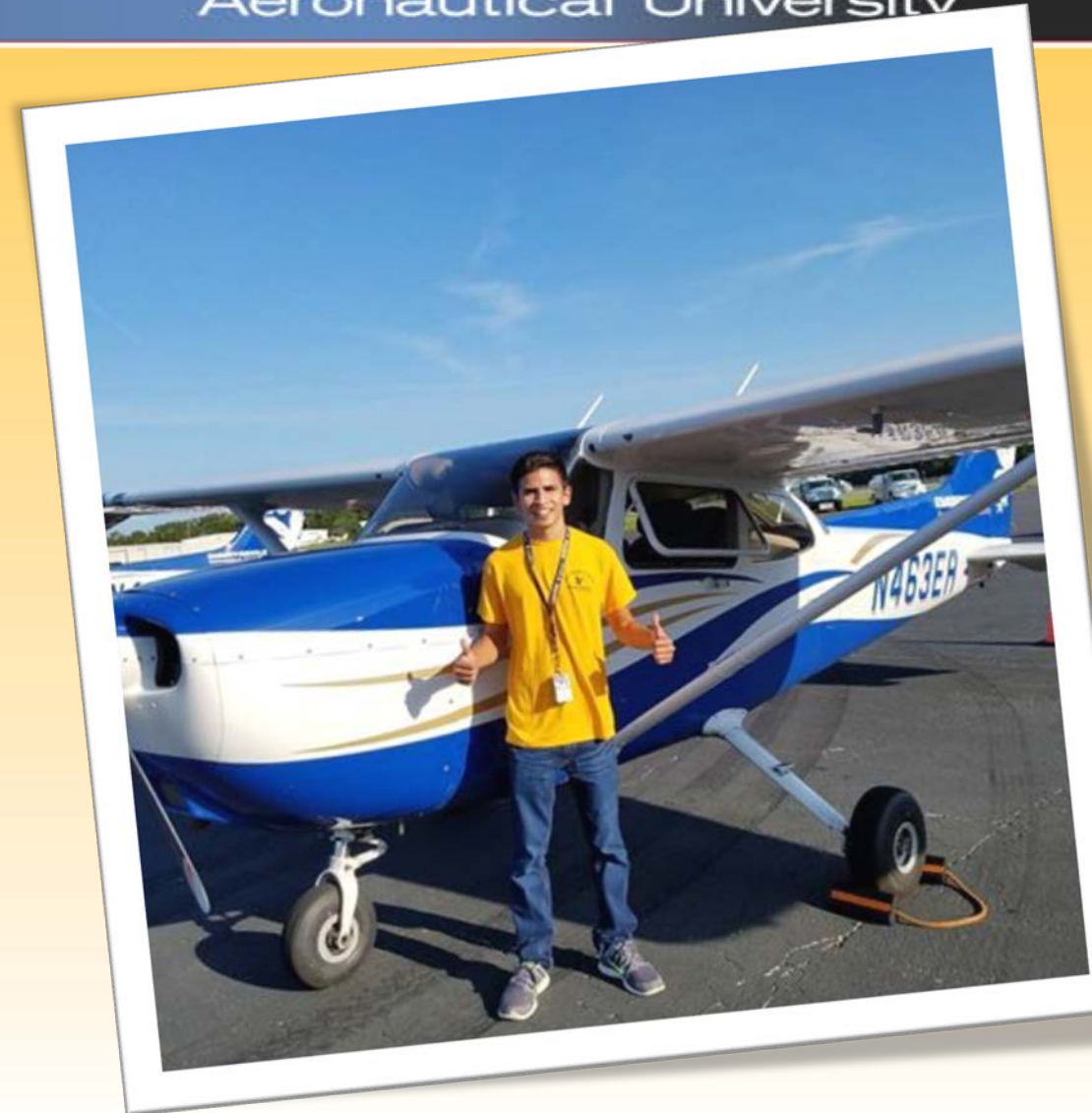
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Our Typical Junior + Senior Year Student

EMBRY-RIDDLE
Aeronautical University

Graduates with:

- Experience in college as a Freshman at ERAU
- A STEM focused education
- 12 College Credits (\$17,200)
- 10% of college completed
- Industry Certifications: PPGS, SUAS, VSO, Part 107
- A greater sense of what is actually possible





Areas of Study

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- Aviation/Flight
- Unmanned Aircraft Systems
- Commercial Space Operations
- Engineering/Computer Science
- Commercial Space Operations
- Aviation Business





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Proposed UAS/Flight Track (16 credits)

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9th Grade

Aerospace
Technologies
(Civil Air Patrol)

10th
Grade

AS 121
Private Pilot
Ground School
5 cred

11th
Grade

AS 220
Unmanned Aircraft
Systems
3 cred

222
UAS Security
3 cred

12th
Grade

AS 235
UAS Operation &
Cross Country Data
Entry
3 cred

AS 237
UAS Applications in
Aerial Photography
3 cred

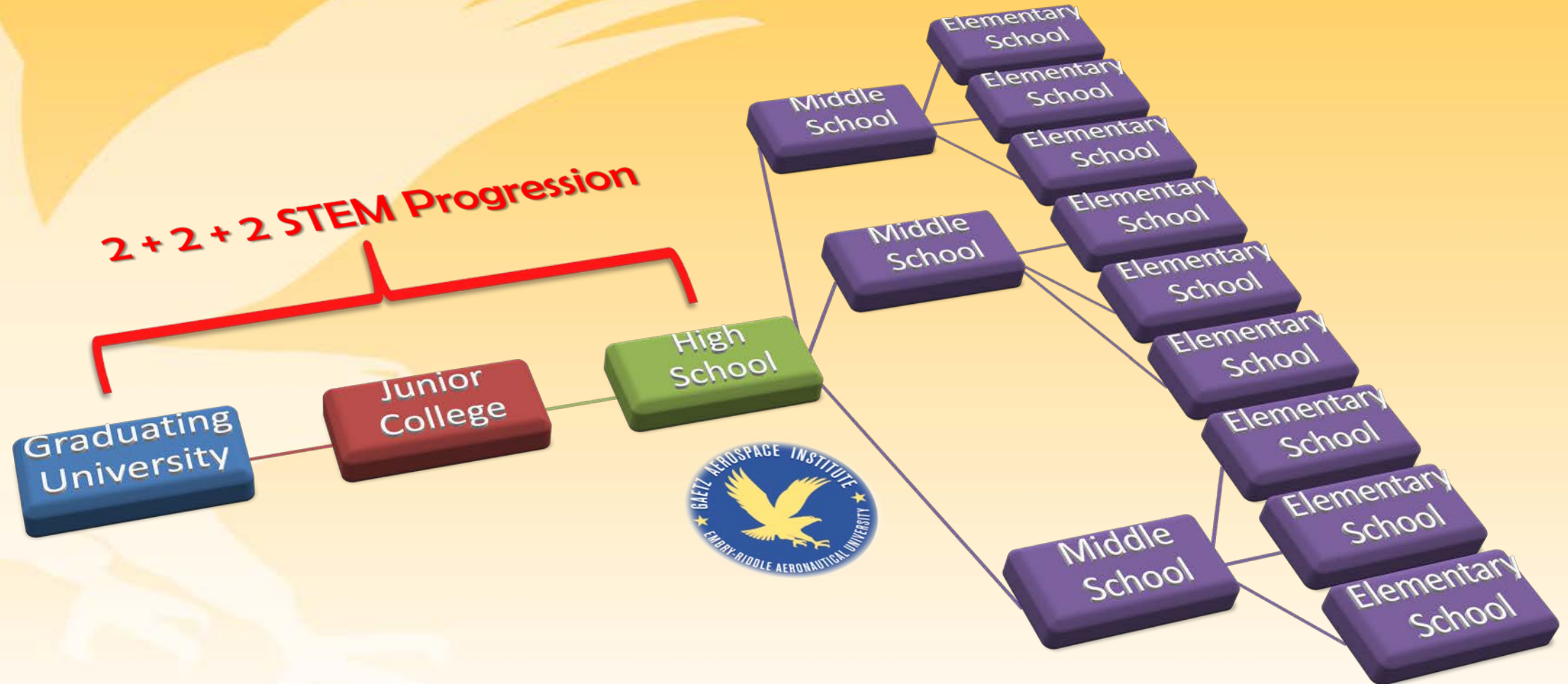
Red Frame
indicates CAPE
funding associated
course



2+2+2: Gaetz → JUCO → Embry-Riddle

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SMART@ER OUTREACH

EMBRY-RIDDLE
Aeronautical University

Advanced High School with Industry Certs

- Private Pilot Operations
- Unmanned Aircraft Systems
- FFA/UAS AgriScience
- Aviation Algebra
- Aviation Physics*
- Aerospace: Mechanical Engineering*

Additional Outreach

- SMART@ER Competitions
 - Seaperch: Underwater ROV
 - UAS Challenge
- SMART@ER Girls Change the World!

