

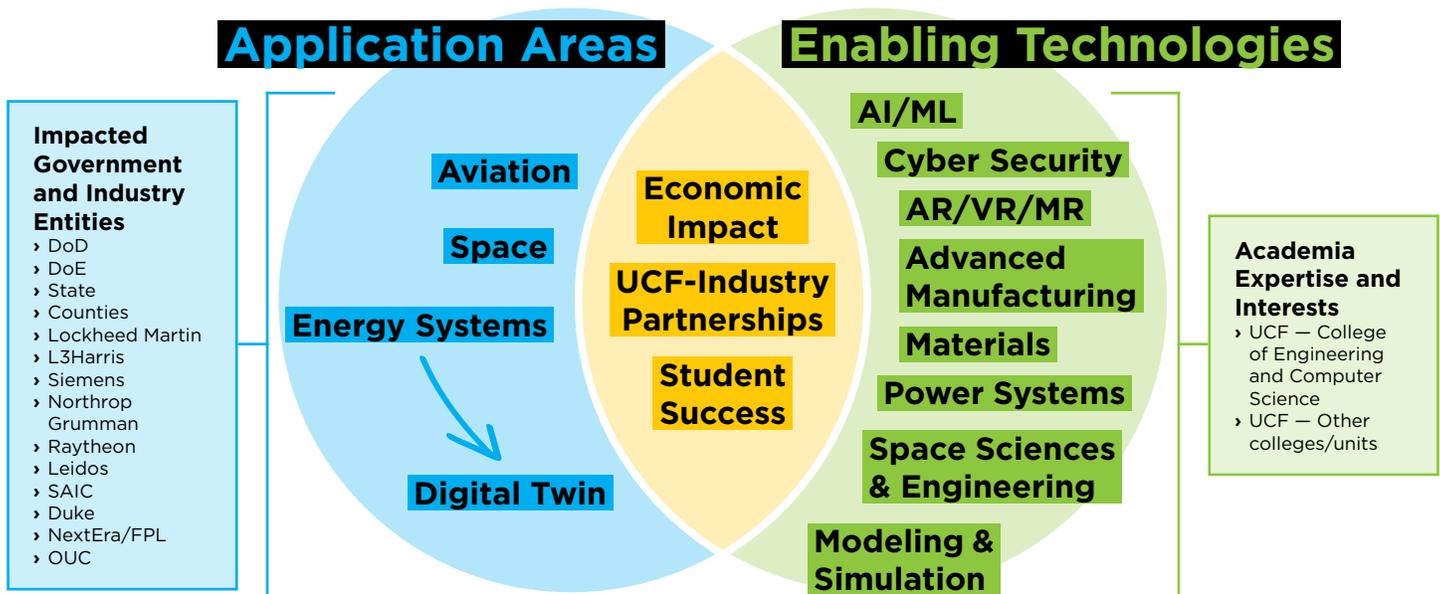


UNIVERSITY OF DISTINCTION

POWERING UP FLORIDA'S HIGH-TECH ECONOMY

According to the Florida Council of 100's Project Sunrise report (April 2019), each month an average of 80,000 high-skilled and 30,000 middle-skilled jobs are left unfilled. With ever greater urgency, industries will require a highly educated, high-quality, talented and creative supply of talent, ready to join a rapidly expanding STEM sector in and around Central Florida and the state. By 2025, there will be two million unfilled jobs in manufacturing in the US (US News, March 27, 2018). The need for workforce talent in computer and information technology occupations is equally significant, with employment in these areas projected to grow 12 percent from 2018 to 2028 — adding about 546,200 new jobs.

UCF's research enterprise and graduates are key drivers of Florida's economy. By building on existing strengths and targeting emerging transdisciplinary solutions to regional and national needs, UCF will boost its ability to power up the state's high-tech economy. The graphic below shows enabling technologies that this LBTR will strengthen and application areas and associated government and industry entities that it will impact.



GOAL 1: Enhance Research, Educational Excellence and Industry Partnerships

UCF will enhance and expand existing strengths to become the research and development partner of choice for Florida's high-tech sector by:

- 1. Strengthening the university's partnerships** in the areas of aviation, space, energy and entertainment, including defense agencies and supported industries.
- 2. Building upon the university's research excellence** in enabling technologies that drive technological advances.
- 3. Delivering impactful research** that is synergistic and applicable across multiple business sectors.

30+

core Florida aviation, space and energy businesses that UCF can power up

68%

of UCF engineering graduates are employed in Florida, earning an average first-year salary of \$62,594

500+

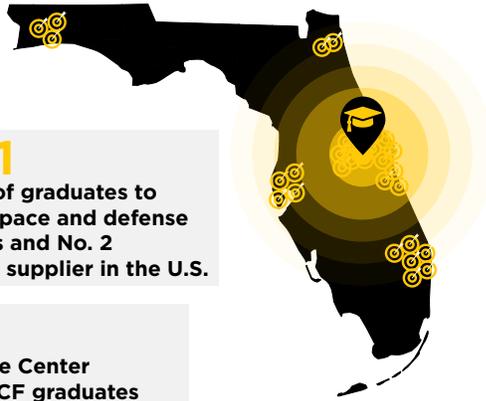
UCF STEM students intern at Lockheed Martin annually

29%

of Kennedy Space Center employees are UCF graduates

No. 1

supplier of graduates to the aerospace and defense industries and No. 2 preferred supplier in the U.S.



No. 1

in the State University System for computer science research expenditures and No. 2 for engineering research expenditures

\$6B

Central Florida modeling, simulation and training hub anchored by UCF

44%

of degrees awarded by UCF's College of Engineering and Computer Science went to minority graduates in 2019-20

GOAL 2: Enhance Student Success

With ever greater urgency, industries require a greater number of highly educated, skilled and creative talent ready to join a rapidly expanding STEM sector in Central Florida and the state. A large number of companies in the state, such as Lockheed Martin, L3Harris, Northrop Grumman, as well as entertainment giants, including Disney and Universal Studios, reside in Central Florida and rely on UCF's students and graduates to power their workforces.

UCF will increase, relying on successful STEM programs, such as the EXCEL program (see graphic to the right), the quantity, quality and diversity of the STEM talent — including engineers, computer scientists with the critically needed creative talent — who graduate with experience in working collaboratively in teams and across disciplines. This initiative is in direct response to the needs and requests of the high-tech sector and is critical to sustain and expand Florida's innovation economy.

The EXCEL Program



92%

First-Year retention to the university (81% in STEM)



53%

increase in STEM graduation of EXCEL students over their matched cohort



1,018

EXCEL students have participated in mentored undergraduate research



5,395

students have been an active part of the EXCEL STEM learning community

In Summary

The Overall Impact of **UCF Powering Up Florida's High-Tech Economy** is to power the UCF College of Engineering and Computer Science past the Top 40 of the *U.S. News and World Report* undergraduate and graduate public university rankings by 2025, with an aspirational goal of the Top 25 by 2035.

More than any other university, UCF is poised to maintain its stature as a dominant supplier of talented engineers for the aerospace and defense industries — as well as other industries and government agencies in Florida — and to advance the state-of-the art technologies that impact the economic prosperity of these industries and the state. The requested investment will expand the diversity and strength of UCF's educational and research portfolio in areas of aviation, space, and energy and intensify partnerships with many related industries.

UCF Powering Up Florida's High Tech Economy

64 Faculty Members
16 Support Positions
EXCEL/Bridge Program Investments
Funds for Student Assistants
Laboratory Equipment Upgrades

Total Expenditures
\$21,811, 200