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 wills 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.
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.

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