

## **Impact Statement: College's/Dean's Accomplishments towards metrics outlined in UCF's strategic plan**

*Introduction:* CECS's strategic plan (SP) Vision; Goals: Be amongst the nation's top producers of engineering and computer science workforce talent and advance research and education that impacts the global society; A Better and Bigger Research Enterprise (G1), Enhance the Quality and Quantity of Graduate Studies (G2), Grow and Develop Faculty (G3), Enhance the Undergraduate Experience (G4), Become Nation's Technology Partner Leader (G5). UCF's SP priorities: Student Success and Well-Being (P1), Discovery and Exploration (P2), Community and Culture (P3), Innovation and Sustainability (P4). CECS's/Dean's select accomplishments (more details in VITA) and their relation to P1-P4/metrics are shown below.

*Student Numbers, Diversity, Student Success (G2, G4, P1):* CECS's undergraduate (UG) student population has increased consistently in the last five years (Fall 18 to Fall 22) from 10,181 (Fa 18) to 11,539 (Fa 22), a 13.3% increase. CECS's graduate (G) student population has increased consistently in the last 5 years from 1,691 (Fa 18) to 2,005 (Fa 22), a 18.57% increase. CECS's student population is highly diverse (43% minorities in UG population, 38.4% in G population). Pockets of sustainable student excellence include CECS Honors students, eli<sup>2</sup>, EXCEL, UCF Programming team, Cyber team.

*Degree Productivity, Student Success (CECS Vision, G2, G4, P1):*

2021-2022 (most productive academic year ever for CECS; 10,000<sup>th</sup> MS and 2,000<sup>th</sup> PhD degree) had record numbers of BS/MS/PhD degrees (2,094/449/149). The BS; MS; PhD degree productivity increased from 1,381 (17-18) to 2,094 (21-22), a 51.63% increase; from 401 (17-18) to 449 (21-22), a 11.97% increase; from 100 (17-18) to 149 (21-22), a 49% increase. According to the latest ASEE data, CECS is ranked 10; 2; 23 in the nation (amongst all engineering and computer science colleges) in the number of BS degrees (1,926); BS minority degrees (603); BS women degrees (369) produced.

*ABET Accreditation (G4, P1):*

ABET (visit February 2021; statement August 2021) fully accredited until September 2027 (next regular cycle) all CECS programs, the longest possible accreditation. ABET visit (October 2022) for MSE will be known in Summer 2023.

*Growing the Research, Graduate Enterprise, our Faculty, Enhance Student Experience (G1, G2, G3, G4, P1, P2):*

The College has seen an increase in research awards, in the last 10 years, from \$22.89M (FY 13) to \$54.4M (FY 22), an increase of 137.7%. The highest (ever) funding year is FY 22 (\$323k awards per faculty; highest ever). The T/TE faculty in CECS have increased, in the last 10 years, from 121 (FY 13) to 168 (FY 22), a 38.8% increase. Hence, the increased funding performance of CECS faculty is more than a factor of 3.5 times higher than the increase in the number of faculty.

*Partnerships (all CECS goals, P1, P2, P3):* CECS has already established, is expanding partnerships with external stakeholders. Most partnerships have three components, *Research; Workforce Development; Branding/Communications*. Examples of existing partnerships include: (A) Lockheed Martin (LM), (B) Siemens-Energy, (C) Northrop Grumman Corporation, (D) Mitsubishi Power. An illustration of the value of these partnerships is the LM CWEP (Collegiate Work Experiences Program) that provides year-long internship opportunities to UCF students. CWEP (before COVID) had approximately 500 interns, now has approximately 300 interns. A significant portion of the interns are STEM/CECS students.

*Growing our Faculty, the Research (G1, G3, P2, P3):*

CECS has hired a good number of faculty through efforts, such as (a) traditional hires, some of them provided because of the old UCF budget model (rewarded colleges due to increased SCHs; CECS has done well), (b) FCI (Faculty Cluster Initiative) hires (CECS has strong participation in eight of the nine FCIs). CECS now finds itself at the cusp of strong hiring cycles (23-25) because of (c) SIP (Strategic Program Initiative), where 60 proposals for faculty hires were entertained by Central Administration and six were funded (CECS has strong participation in all six), (d) Operational Excellence (OE) funds (based on an LBR proposal, spearheaded by CECS, the State provided \$20M of new funds to UCF; Central Administration will fund seven faculty hiring initiatives, through OE funds; CECS has strong participation in six out of the seven initiatives). CECS's Virtual Seminar Series (started in May 2020) helps UCF faculty connect internally/externally.

*Select Dean's Efforts (all CECS's SP goals, all UCF SP priorities):*

The past/near future growth of faculty resources (traditional hires (partially due to increased SCHs), FCIs, SIPs, OE) is a result of strengths collectively built at the college. The BOG grant's (awarded to UCF in 2014, resulted in increased CS, IT, CpE degrees from 288 (12-13 baseline year) to 561 (17-18 (end of grant), to 959 (21-22)) institutionalization by UCF, due to its impressive results, contributed to new faculty growth, new GTAs, new staff for CS, IT, CpE. There are CECS efforts and plans to increase CECS/UCF revenue (e.g., increases in MS enrollment, out of state student recruits); these plans will keep the momentum of upcoming SIPs, OE efforts. SIP and OE also funded other than faculty hiring efforts for CECS such as infrastructure support (Jump-Start), UTA-ULA program, increased GTA stipends, new GTAs, research staff, a notable achievement. CECS has supported research pockets of excellence (e.g., CRCV, CATER, FCIs) and educational pockets of excellence (e.g., eli<sup>2</sup>, EXCEL, UCF Programming, Cyber). CECS has led/supported programs (internal, external funds) that enhance educational experiences of diverse student pools (e.g., eli<sup>2</sup>, EXCEL, CWEP, Flit-Path, others). CECS has supported research productive faculty (professorships (philanthropic support), grant augmented salaries, infrastructure (expanded support in 20-21, 21-22)). I have advocated for faculty awards (Reach for the Stars, Pegasus, Trustee), with success. I supported several tenure and promotion cases that have come across my desk. These decisions were made based on the faculty's contributions to the College, UCF, and their discipline, contributions that were varied and multi-faceted, as needed to fulfill the wide range of an academic institution's responsibilities.