- $900K+ CEC Scholarships
- Largest number of African American BS awarded among peers and peer aspirants
  - Greatest growth in USC
- Highest salaries & lowest debt ratio at USC
- 70% South Carolinians & 70% of alumni in SC
- 170% growth in # of female freshmen (2010)

2023 Blueprint for College of Engineering and Computing

Mission: We create and disseminate knowledge that advances the practice of engineering and computing. We are committed to working on complex projects that are inherently transdisciplinary. We leverage the comprehensive nature of the state's largest university to graduate liberally educated engineers and computer scientists capable of teaching themselves new knowledge beyond the boundaries of their education.

Values: We value innovation, societal relevance, inclusivity, and collaboration.

Progress on the 2022 goals (on 1-5 scale):

1- Student success and teaching excellence

	comments	score

• Ensure and document UG students' mastery of critical thinking, analytical skills, communication skills, and problem solving
     o more open-ended lab/design/research experiences
     o injection of ethics and professional development
     o document the progress for ABET accreditation (2023)
	World-class labs. New aero, CpE, & EE labs. ABET reports being finalized for June.	4.5

• Expand the number of the TTT faculty to achieve UG/TTT < 20 o the TTT faculty ranks need to be 150+.	Hired 40+ TTT since 2017. Settled at 125 since 2019.	2
• Make BME a department o USC remains the only university w/ BME as a program.	The commitment of four $2M/yr → two $2M/yr	2

• Continuous improvement of inclusive and distinctive initiatives
     o recruiting of URM students
     o retention, graduation, and post-graduation success
     o First Gen Scholars program
     o Honors-specific sections
     o professional advisors, plus Faculty Advising Fellows
	Recruiting, retention, graduation, placement, first-gen in PPT slides. 5-6 Hon. sects per major. Pioneered 4-yr advising. Student services ~7 → 21+	4.5

2- Excellence in research and scholarship

	comments	score
• Create critical mass by hiring into strength or creating strength. • Invest in infrastructure and grad students through startups.	Startups average $600K. Can at best maintain size.	2

• Incentivize and support large, collaborative projects
     o FY22: 17 *Fed* awards >$500K, w/ 7 awards >$1M (max $10.0M)
     o FY16: 4 *Fed* awards >$500K.
     o FY23 YTD: 17 >$500K, w/ 5 >$1M (max $10.0M)
	Hired. PFP. +70K ft^2. +2 ADRs. Best preawards. *Shared* IDC. Postawards reports.	4.5

3- Sustainability of the CEC mission

	comments	score
• Continue to align with the budget model	Inertia commitments	2.5
• Expand and establish international partnerships	SMU; Oman, NSYSU soon	3
• Continue to invest in UG labs ($216K), maker space ($40K), student services ($150K), Research upfit ($264K), TA support, instructors, professional advising, etc.	Also $702K for IT secure network. DoIT?!	4
• Continue to share 30% of legacy-model IDC		4.5

Observations and Comments:

- Graduation rates & success improving:
  - CEC/USC: 44%/66% for 2010 → 56%/72% for 2016
  - Tripled Student services; Peer mentoring; Advising; Curricular simplification
- The startup commitments for 25TTT hires in '17-'19 were built into the plan developed for the CEC fee request. The removal of $3M/yr from the base affected the path of the college.
  - This commitment was not visible to the budget implementers.
- Freshman engineering students take 4-6 CEC credits, and computing students take 8-10.
  - The 1st year retention of CEC lags USC's by 15 percentage points.
- Financial implications of being a research active college of engineering and computing:
  - CEC is the only college where every TTT hire is expensive (~$600K startup & hi salary)
  - Research activity requires additional headcounts: pre-awards (4); post-awards (4+); postdocs (53). The $45K/head tax, plus the rent on 150 ft^2 per head is ~$3M.

2023-2024 Plans
Student success and teaching excellence
Submit ABET reports in June, go through the review in early Fall.
Attract additional students:
- BA in Biomed (submit the request), BA in CS & MS in AI (start the conversation)
- BS in Advanced Manufacturing and industrial Engineering (start the process)
- International partnerships: Oman (oversight @4% tuition), SMU (MS), Shorelight (ME)

Retain current students:
- BA in CEC (start the process)

Excellence in research and scholarship
New revenue in support of research:
- Implement graduate fee of $2,250/sem for thesis-based or dissertation-based degrees
- Roll out Industry consortia and short courses

Sustainability of CEC mission
Hiring opportunism:
- Continue to compete for B2F (received 3 of 12 this year)
- Compete aggressively for any eventual resources from USC hiring initiatives
- Compete for the majority of the SRNL positions from Governor's $100M match
- Continue to push for large DoD and NIH programs where startups can be built in
- Increase the number of jointly appointed research-active SRNL staff
- Require AY buyout to cover or subsidize the $45K/head before a postdoc can be hired

Gifts and philanthropy:
- Close three major gifts: college naming ($25M+ matching), DEI ($3M), First Gen ($2M)
- In computing, IT, and other high-demand fields, start sustaining partners programs
- Annual alumni and donor gala