

# College of Engineering Faculty & Staff Retreat

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**August 18, 2022**



## **Call to Order**

- ☐ **Faculty Secretary present for minutes?**

**Guest Speakers: Provost Salvador Ochoa; Dean of Graduate Studies, Tracy Love; Interim VP of Research & Innovation, Hala Madanat; Senior AVP & Deputy CIO, James Frazee**

## **State of the College**

- ☐ **Announcements and Updates**
- ☐ **Communication & Community**
- ☐ **CoE Development**
- ☐ **CoE Constitution and Bylaws Update**
- ☐ **Research & Graduate Program Update**
- ☐ **Undergraduate Program Update**
- ☐ **Student Success & Engagement**
- ☐ **AER Student Club Presentation**

## **Other Business**

- ☐ **2022-23 CoE Committee Election – Constitution & Bylaws Parliamentarian & Chair**
- ☐ **Approval: 4/26/22 CoE Faculty Minutes**

## **Adjournment**

# **Welcome Guests**

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**Provost Salvador Ochoa**

**Dean Of Graduate Studies, Tracy Love**

**Interim VP of Research & Innovation, Hala Madanat**

**Senior AVP & Deputy CIO, James Frazee**



**my.SDSU**

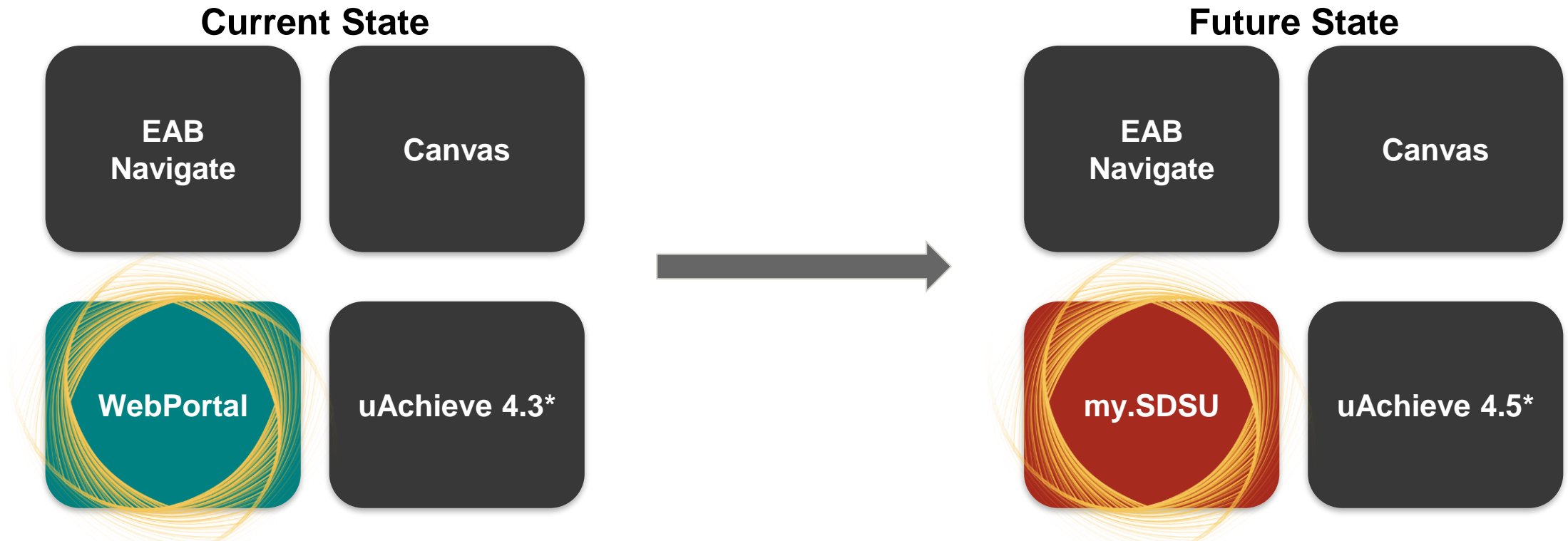
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**Fall 2022 Update**  
**My.SDSU Training & Support Team**



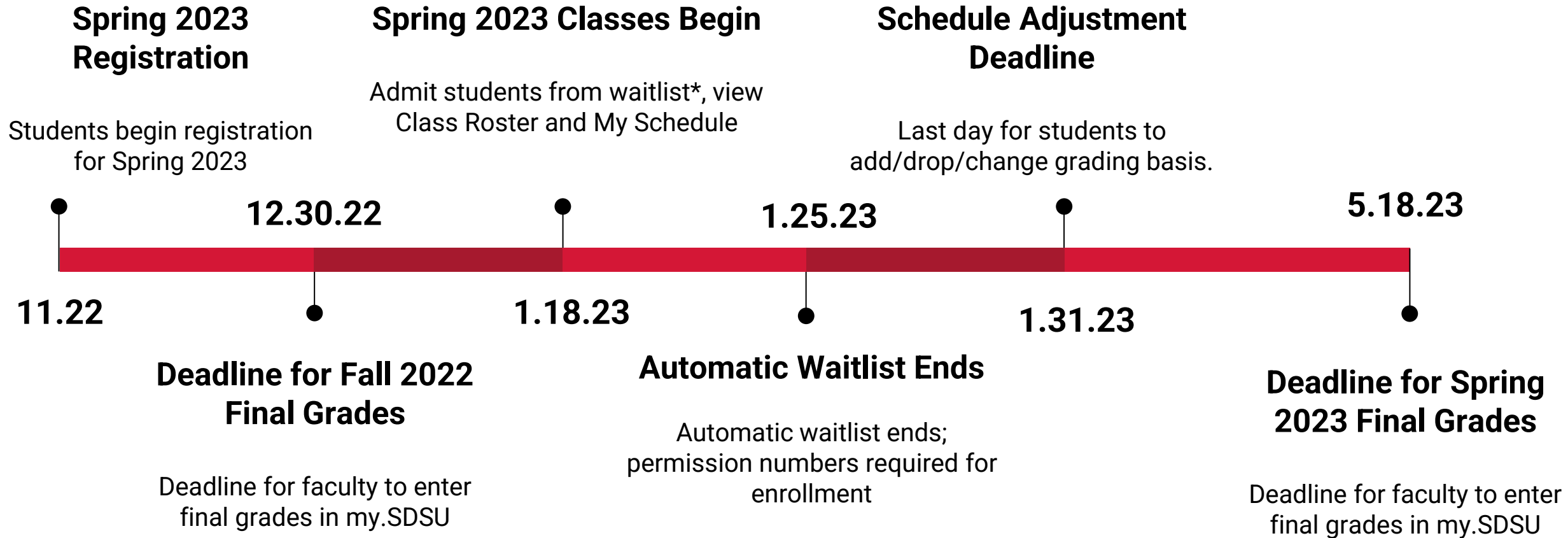
# WHAT SYSTEMS CHANGE FOR FACULTY?

All prior use of **WebPortal's** functionality  
will transition to **my.SDSU** on October 10 2022



These key processes include: accessing teaching schedules, course information, course rosters, and student information; and viewing and assigning grades in addition to student feedback surveys.

# FACULTY MY.SDSU USAGE



**Note:** The waitlist will be changing to a first on, first off waitlist. Students require permission numbers to enroll in a course between the sixth and tenth day of classes. Additional information about changes to academic policies is forthcoming.

# FACULTY COMMUNICATION STRATEGY

**Communicate location  
& info about faculty training**

**Training Materials**



**Faculty Messaging Campaign**



**Meet & Greets and Roadshows**

**Inform faculty of  
my.SDSU transition**

**Conduct open houses and  
college-based roadshows for  
faculty & support teams**

# HOW WILL FACULTY GET SUPPORT?

- **my.SDSU.edu - one stop for training and support**
- Virtual Faculty Instructional Technology (vFIT) Support Center
  - Starting Oct 1, Zoom Virtual Drop in from 8-4:30 pm for Faculty
  - Questions from vFIT will transfer over to FAQs on My.SDSU Web Site
  - In-person support at FIT center, 8-4:30 pm
- Email Support Requests & ServiceNow
  - Goal is to respond to every question within 24 hours
- Support from Business Unit Partners in IT, Enrollment, Financial Aid and Student Affairs



# Questions/Comments?

# State of the College

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# Announcements & Updates

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# Faculty Recognitions

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# CCEE Department Chair – Janusz Supernak



## Janusz Supernak

### SDSU Department Chair of Civil, Construction & Environmental Eng.

Ph.D., Technical University, Warsaw, Poland

Janusz came to the US in 1980 as Visiting Assistant Professor, invited by SUNY Buffalo. Then was hired as Associate Professor at Drexel University in 1981. ,

In 1984, he moved to SDSU where he was promoted to Full Professor in 1988 and was elected CCEE Chair in 1992. Janusz continued as department chair until 2010 and again between 2014 and 2022.

In 1992, his department had just a single major (CivE), had no female faculty and one Hispanic, had no Advisory Board, no single endowment, no international programs, and very limited research activities.

Quite a different picture today - with four programs, three current NSF Career Awards, multi-million dollar endowment portfolio, and two Erasmus+ agreements.

Janusz has been reelected as Advisor to the Student Chapter of Civil Engineers for the last 30 years, receiving several national recognitions for his Chapter's and his own achievements.

He has received some top SDSU recognitions, including the Monty Award, Top 25 Award and Most Influential Teacher Award.

He pioneered the Faculty-led Study Abroad program in the College of Engineering and led six editions of this program in Poland.

Janusz has taught various courses in Transportation Engineering, Engineering Economy and Statistics. He has authored over 100 publications, is listed by Google Scholar among top five researchers internationally in the Travel Demand Management category, and among the top 10 in the Congestion Pricing category. And has generated over 4 million in grants and contracts.

He was a PI on the World Bank's Project in Jalalabad Afghanistan and has been involved in the SDSU-G program.

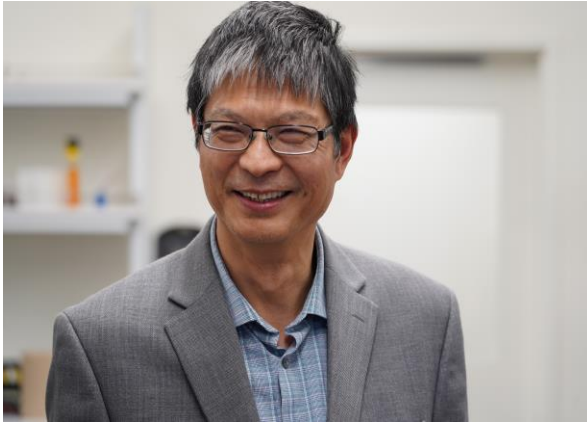
He lives with his wife, Edyta in the picturesque Crest area. His passions are music, table tennis and chess.

# ECE Department Chair – Chris Mi

**Chris Mi**

**SDSU Department Chair of Electrical & Computer Engineering**

Ph.D., University of Toronto, Canada



Prior to joining SDSU, Chris was a faculty member at the University of Michigan-Dearborn.

Chris joined SDSU in 2015 as Chair of the Department of Electrical and Computer Engineering.

During his tenure as chair, he has led the department with significant growth, including doubling the department research funding, recruiting 8 new faculty members, receiving 2 CAREER awards, establishing a new MS Computer Engineering program, and two Online MS programs. Chris has brought in nearly \$7 million in research funding as a PI. He has published 5 books, 208 journal papers, and 120 conference papers. His h-index is 75 with a total citation of 22,000, one of the highest in the college.

Chris has served extensively for the IEEE. He has served as an area editor, associate editor, and guest editor-in-chief of II journals and general chair of more than 10 IEEE international conferences. He has won numerous awards, including the Distinguished Teaching Award, Distinguished Research Award, IEEE best paper award, and the IEEE Power Electronics Emerging Technology Award. Chris is the recipient of the 2022 Albert W. Johnson Research Lectureship and was named distinguished professor, SDSU's highest research honor.

Chris is a fellow of IEEE and SAE which is a very high honor bestowed upon very few researchers.

# Introduction of New Faculty & Staff

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# New Interim ECE Department Chair



**Satish Kumar Sharma**

**Interim Department Chair of Electrical & Computer Engineering**

Ph.D., Indian Institute of Technology (IIT), Banaras Hindu University,  
India

## **Current Position**

Professor & Director of the Antenna & Microwave Laboratory (AML)  
Department of Civil & Environmental Engineering  
San Diego State University

## **Areas of Specialization**

Antennas and arrays, RF/Microwave engineering and applied  
electromagnetics.



# Meet our New CCEE Department Chair



**Dongye (Don) Zhao**

**Department Chair of Civil, Construction & Environmental Eng.**

Ph.D., Lehigh University, Bethlehem, PA

## **Previous Position**

Professor & Engineering Alumni Distinguished Chair

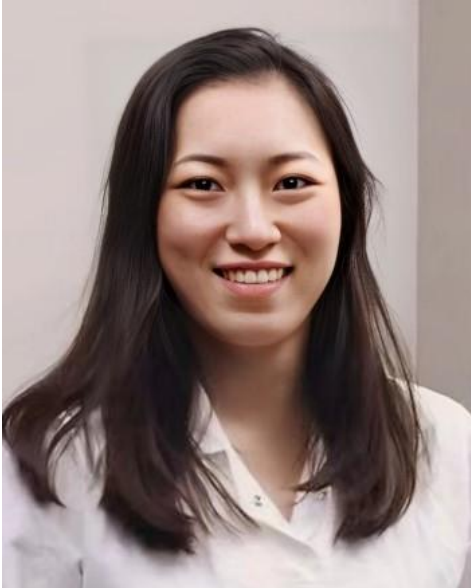
Department of Civil & Environmental Engineering

Auburn University, Auburn, AL

## **Areas of Specialization**

In situ degradation of organic pollutants & immobilization of metals/metalloids/radionuclides in soil & groundwater using stabilized nanomaterials & nanotechnologies.

# Meet our New CCEE Faculty



**Hanyang Li**

**Assistant Professor of Civil, Construction & Environmental Eng.**

Ph.D., The Ohio State University, Columbus, OH

**Previous Position**

Postdoctoral Researcher, University of California, Davis, CA

**Areas of Specialization**

Theoretical, experimental, and computational analysis of air pollution.

# Meet our New ECE Faculty



**Tong Huang**

**Assistant Professor of Electrical & Computer Engineering**

Ph.D., Texas A&M University, College Station, TX

**Previous Position**

Postdoctoral Associate, MIT, Cambridge, MA

**Areas of Specialization**

Data Analytics, Cyber Security, and the Modeling & Control of Power Grids with deep inverted based resources.

# Meet our New ME Faculty



**Sara Adibi**

**Assistant Professor of Mechanical Engineering**

Ph.D., National University of Singapore, Republic of Singapore

**Previous Position**

Assistant Research Professor, Center for Advanced Vehicular Systems  
Mississippi State University, Starkville, MS

**Areas of Specialization**

Computational Mechanics; Multiscale Modeling of Materials

# Meet our New ME Faculty



**Maysam Heydari Gharahcheshmeh**

**Assistant Professor of Mechanical Engineering**

Ph.D., University of Houston, Houston, TX

**Previous Position**

Assistant Professor, Dept. of Mechanical Engineering,  
University of Mississippi, Oxford, MS

**Areas of Specialization**

Advanced Manufacturing; Chemical Vapor Deposition Methods

# Engineering Staff Update



**Liza Aguire-Oviedo**  
**CoE Internship & Career Coordinator**

Peace Corps Prep Coordinator – Arizona State University  
MS Organizational Leadership – Arizona State University  
BA Social Studies - San Diego State University



**Monica Hughes**  
**CoE CCEE Coordinator**

Child & Family Development – SDSU College of Education  
Grossmont Community College



**Leviticus Johnson**  
**CoE Major Advisor**

Fowler College of Business – Administrative Support for Finance, Management and Marketing & Center for Student Success  
BA Public Administration – San Diego State University

# Engineering Staff Update



**Luis Topete**  
**CoE Outreach Director**

**MESA Program Director**  
**BA Communications – San Diego State University**



**Priscilla Leon**  
**CoE Outreach Schools Manager**

**MESA Program Coordinator**  
**BA Child & Family Development, Minor in Sociology – San Diego State University**



**Milagro Ramos**  
**COE Femineer/WE Program – Outreach/Student Success Coordinator**

**MESA Assistant Coordinator**  
**BS Biochemistry-Chemistry – University of California, San Diego**

# Tenured/Tenure-Track Faculty

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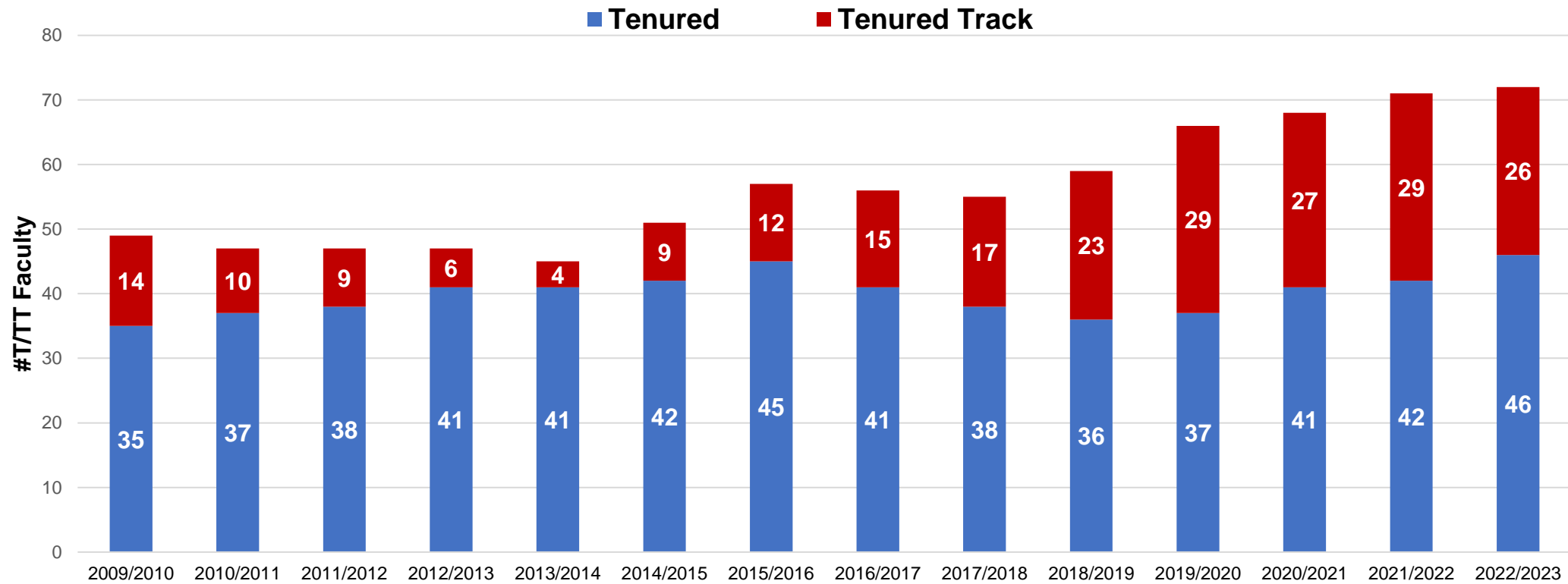


# TENURED/TENURE-TRACK FACULTY

	AE	CCEE	ECE	ME	CoE
Professors	5	4	7	10	26
Associate Professors	2	6	8	3	19
Assistant Professors	4	7	4	7	22
Fall 2022 T/T Faculty*	11	17	19	20	67
New Fall 2022 Positions	0	2	1	2	5
Total T/T Faculty	11	19	20	22	72

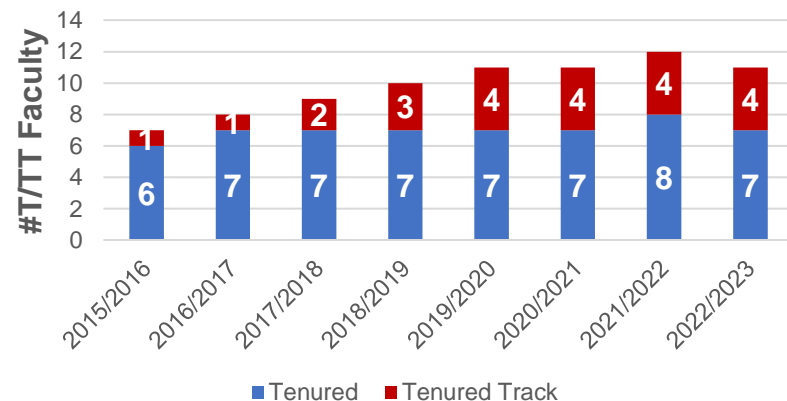
\*Includes promotions received in 21/22 to be effective Fall 2022

# T/TT FACULTY

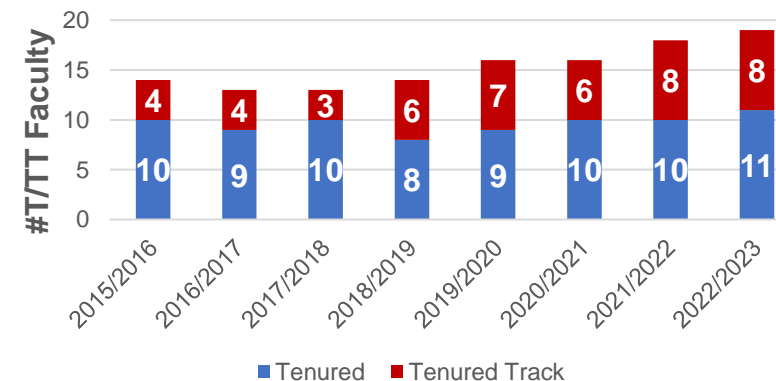


# T/TT FACULTY BY DEPARTMENT

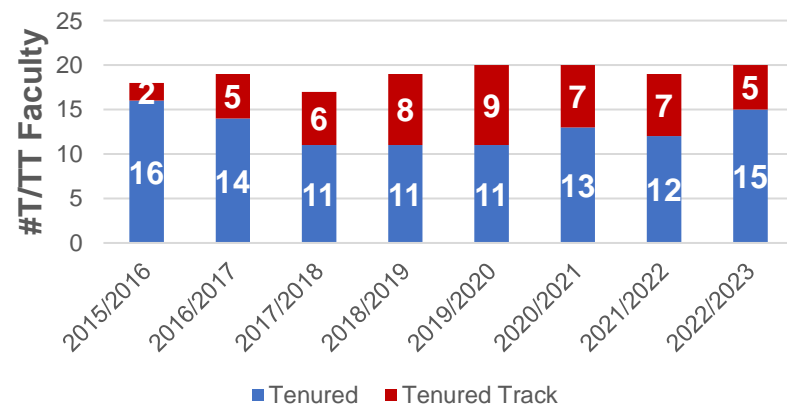
**AE**



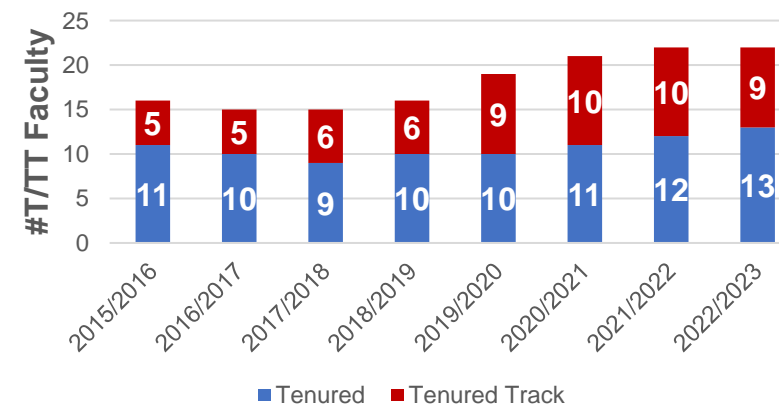
**CCEE**



**ECE**



**ME**



# Carnegie R1 Classification as of 2021

- There are 146 institutions that are classified as R1: Doctoral Universities – Very high research activity
- Out of 146 R1 institutions, ~45 have no medical school

# Engineering T/TT Faculty for Leading R1 Institutions without Medical Schools

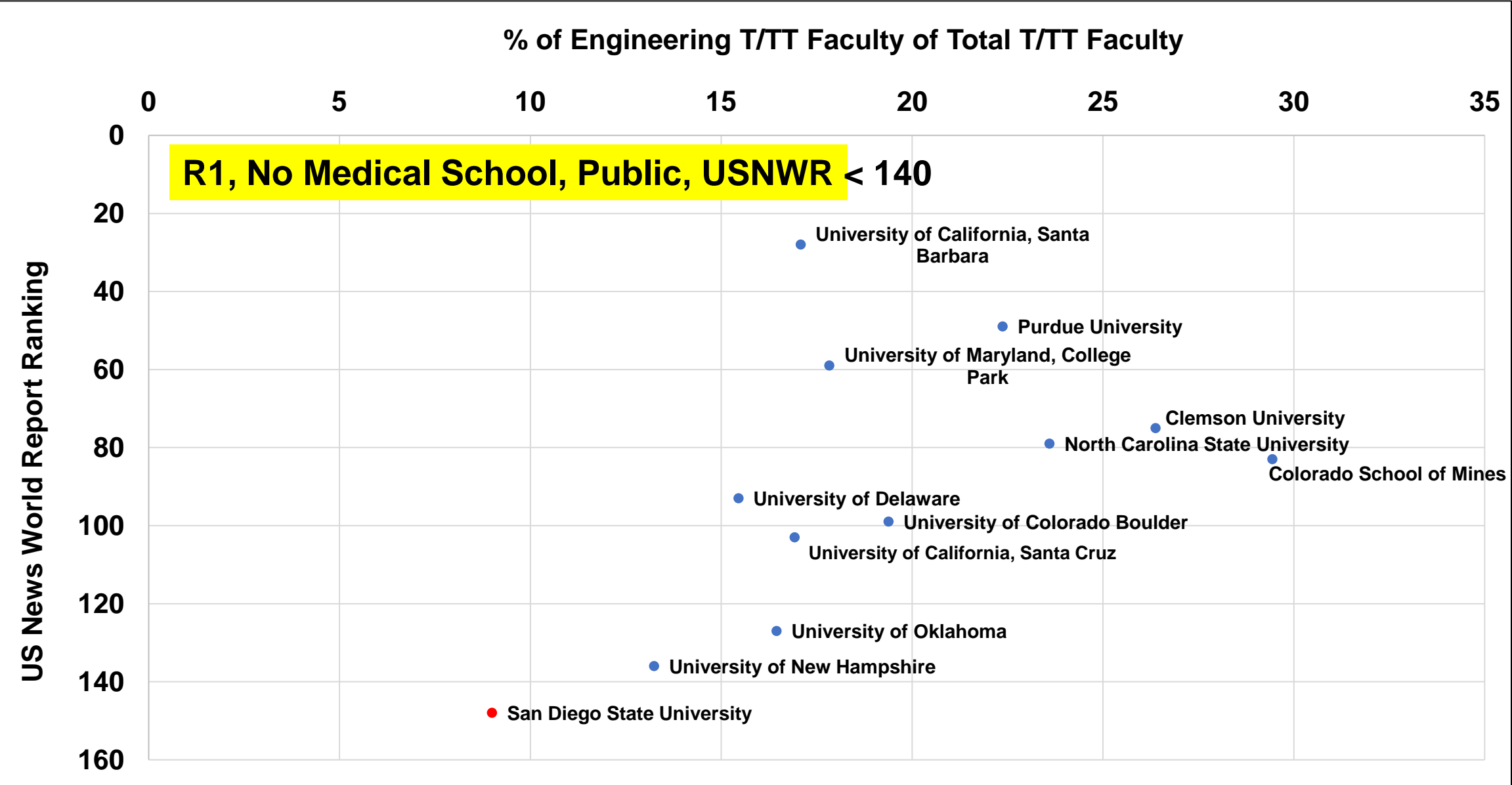
No	Institution	# T/TT, Fall 2020*	Control	City	State
1	Georgia Institute of Technology	583	Public	Atlanta	GA
2	Purdue University	394	Public	West Lafayette	IN
3	North Carolina State University	337	Public	Raleigh	NC
4	Brandeis University	301	Private (non-profit)	Waltham	MA
5	Rensselaer Polytechnic Institute	295	Private (non-profit)	Troy	NY
6	University of Maryland, College Park	255	Public	College Park	MD
7	Clemson University	244	Public	Clemson	SC
8	University of Colorado Boulder	234	Public	Boulder	CO
9	University of Notre Dame	231	Private (non-profit)	Notre Dame	IN
10	Oregon State University	205	Public	Corvallis	OR
11	Northeastern University	197	Private (non-profit)	Boston	MA
12	Colorado School of Mines	184	Public	Golden	CO
13	University of Texas at Arlington	172	Public	Arlington	TX
14	University of Oklahoma	155	Public	Norman	OK
15	Princeton University	154	Private (non-profit)	Princeton	NJ
16	University of Texas at Dallas	153	Public	Richardson	TX
17	University of California, Santa Barbara	150	Public	Santa Barbara	CA
18	University of Delaware	138	Public	Newark	DE
19	Oklahoma State University–Stillwater	134	Public	Stillwater	OK
20	University of Alabama	128	Public	Tuscaloosa	AL
21	George Mason University	123	Public	Fairfax	VA
22	University of Texas at San Antonio	113	Public	San Antonio	TX
23	University of California, Santa Cruz	98	Public	Santa Cruz	CA
24	University of New Mexico	97	Public	Albuquerque	NM
25	University of Maryland, Baltimore County	84	Public	Baltimore	MD
26	University of Texas at El Paso	84	Public	El Paso	TX

\* Source - Profiles of Engineering and Engineering Technology, ASEE, 2020

# Engineering T/TT Faculty for Leading R1 Institutions without Medical Schools

Institution	Medical School	Engineering # T/TT, Fall 2020	Total # T/TT	Engineering T/TT (% of Total T/TT)	Control	City	State
Colorado School of Mines	No	184	625	29	Public	Golden	CO
University of Texas at Dallas	No	153	535	29	Public	Richardson	TX
Clemson University	No	244	925	26	Public	Clemson	SC
University of Notre Dame	No	231	890	26	Private (non-profit)	Notre Dame	IN
Northeastern University	No	197	786	25	Private (non-profit)	Boston	MA
University of Maryland, Baltimore County	No	84	336	25	Public	Baltimore	MD
North Carolina State University	No	337	1428	24	Public	Raleigh	NC
Purdue University	No	394	1761	22	Public	West Lafayette	IN
Oregon State University	No	205	939	22	Public	Corvallis	OR
University of Colorado Boulder	No	234	1207	19	Public	Boulder	CO
Princeton University	No	154	812	19	Private (non-profit)	Princeton	NJ
University of Maryland, College Park	No	255	1430	18	Public	College Park	MD
University of Maine	No	76	444	17	Public	Orono	ME
University of California, Santa Barbara	No	150	878	17	Public	Santa Barbara	CA
University of California, Santa Cruz	No	98	579	17	Public	Santa Cruz	CA
University of Texas at El Paso	No	84	507	17	Public	El Paso	TX
University of Oklahoma	No	155	942	16	Public	Norman	OK
University of Delaware	No	138	893	15	Public	Newark	DE
Oklahoma State University–Stillwater	No	134	882	15	Public	Stillwater	OK
University of New Hampshire	No	60	453	13	Public	Durham	NH
<b>San Diego State University</b>	<b>No</b>	<b>71</b>	<b>798</b>	<b>9</b>	<b>Public</b>	<b>San Diego</b>	<b>CA</b>
University of Alabama	No	128	994	13	Public	Tuscaloosa	AL

# % of Engineering T/TT Faculty at R1 Institutions without Medical School



# Engineering T/TT Faculty at CSU

Campus	Number of T/TT Engineering Faculty as % of Total T/TT Faculty
CalPoly San Luis Obispo	23.0%
CalPoly Pomona	14.0%
San Jose State University	13.9%
CSU Los Angeles	9.8%
CSU Sacramento	9.6%
CSU Long Beach	9.5%
San Diego State University	8.9%

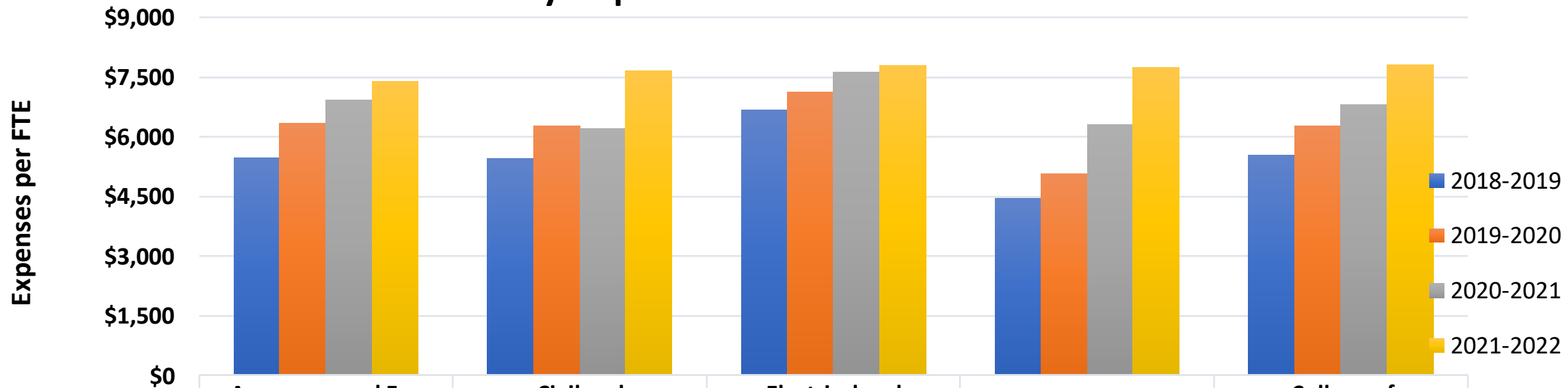
Campus	Number of T/TT Engineering Faculty
Arizona State University	326
UC Davis	206
CalPoly San Luis Obispo	149
UC Riverside	128
CalPoly Pomona	97
San Jose State University	89
CSU Long Beach	83
University of Nevada, Reno	79
San Diego State University	71

\* Source - Profiles of Engineering and Engineering Technology, ASEE, 2021



# COE Instructional Budget

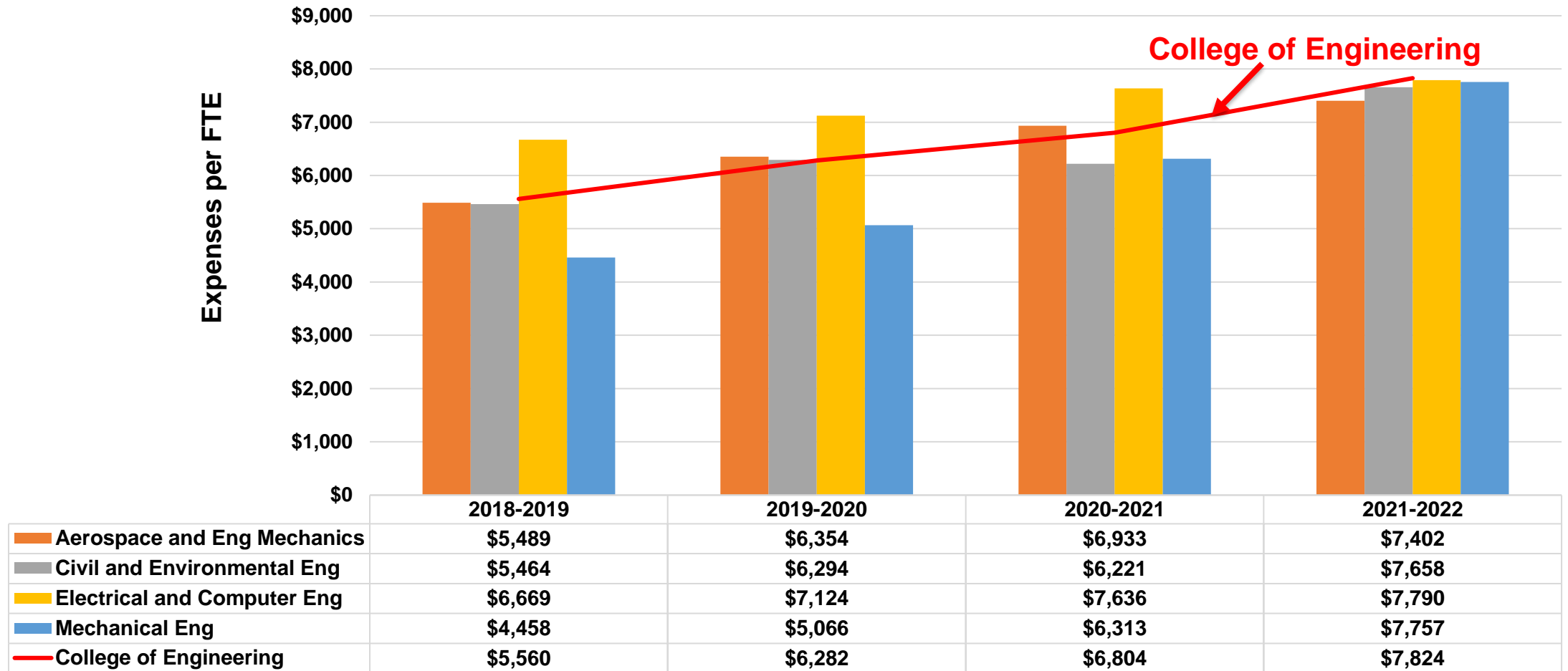
**Instructional Expenses per FTE  
by Department 2018-2022**



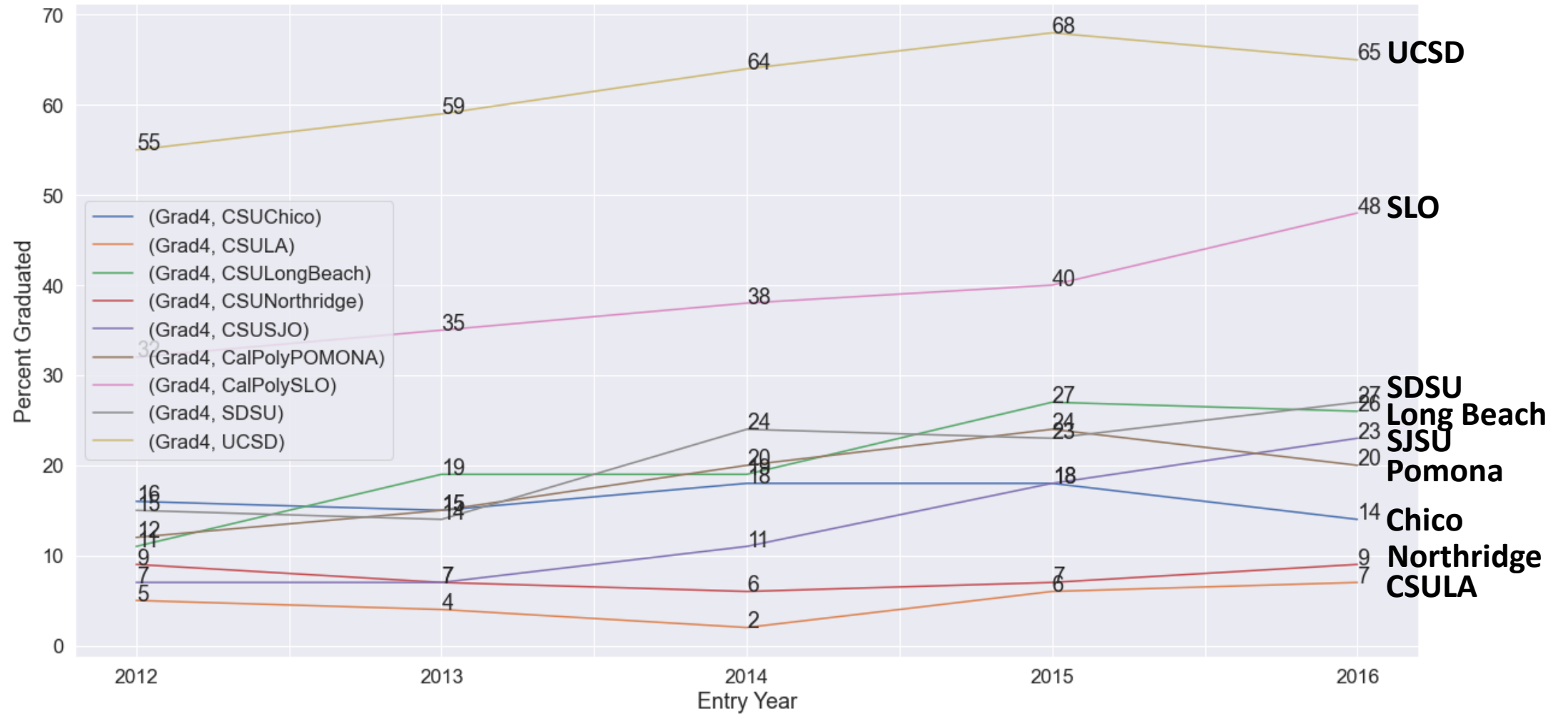
	Aerospace and Eng Mechanics	Civil and Environmental Eng	Electrical and Computer Eng	Mechanical Eng	College of Engineering
2018-2019	\$5,489	\$5,464	\$6,669	\$4,458	\$5,560
2019-2020	\$6,354	\$6,294	\$7,124	\$5,066	\$6,282
2020-2021	\$6,933	\$6,221	\$7,636	\$6,313	\$6,804
2021-2022	\$7,402	\$7,658	\$7,790	\$7,757	\$7,824

# COE Instructional Budget

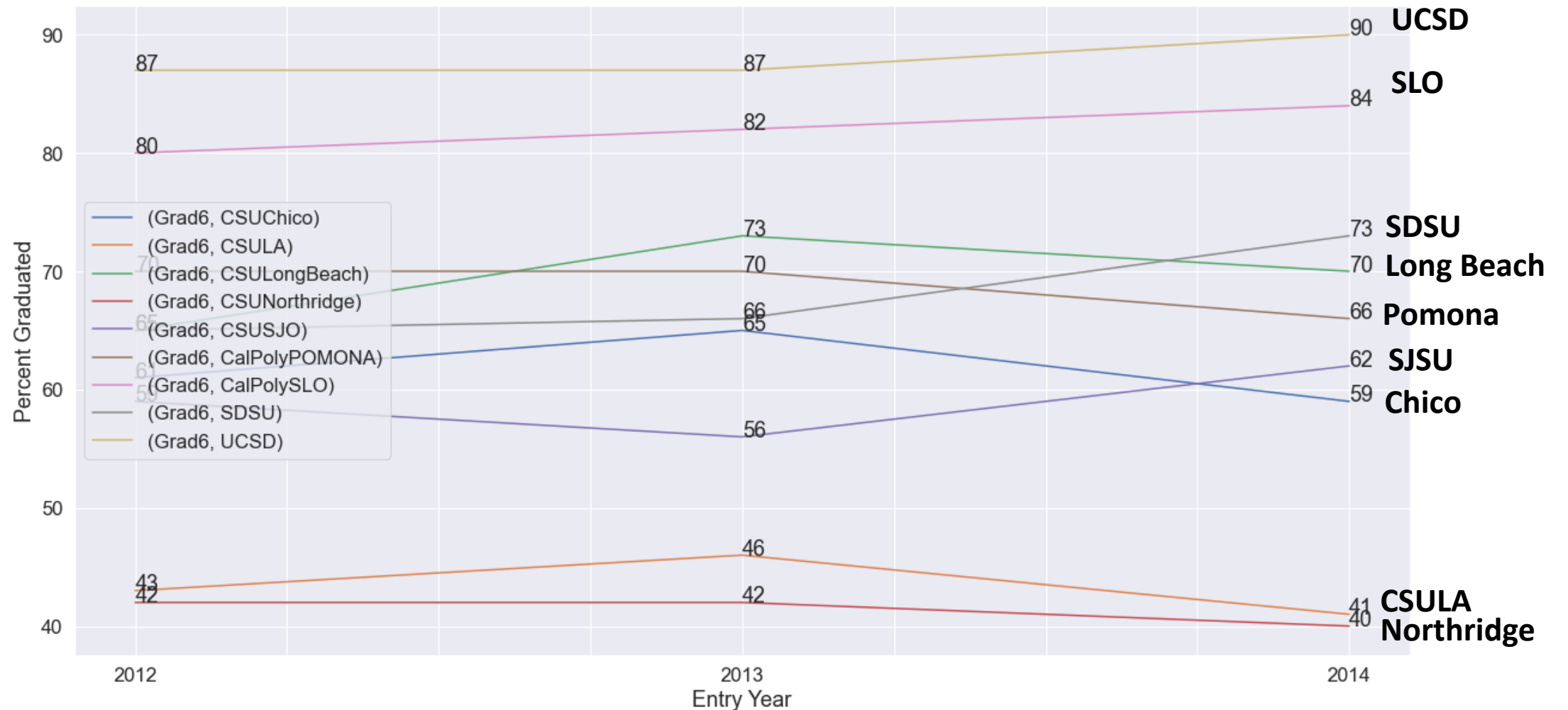
## Instructional Expenses per FTE by Department 2018-2022



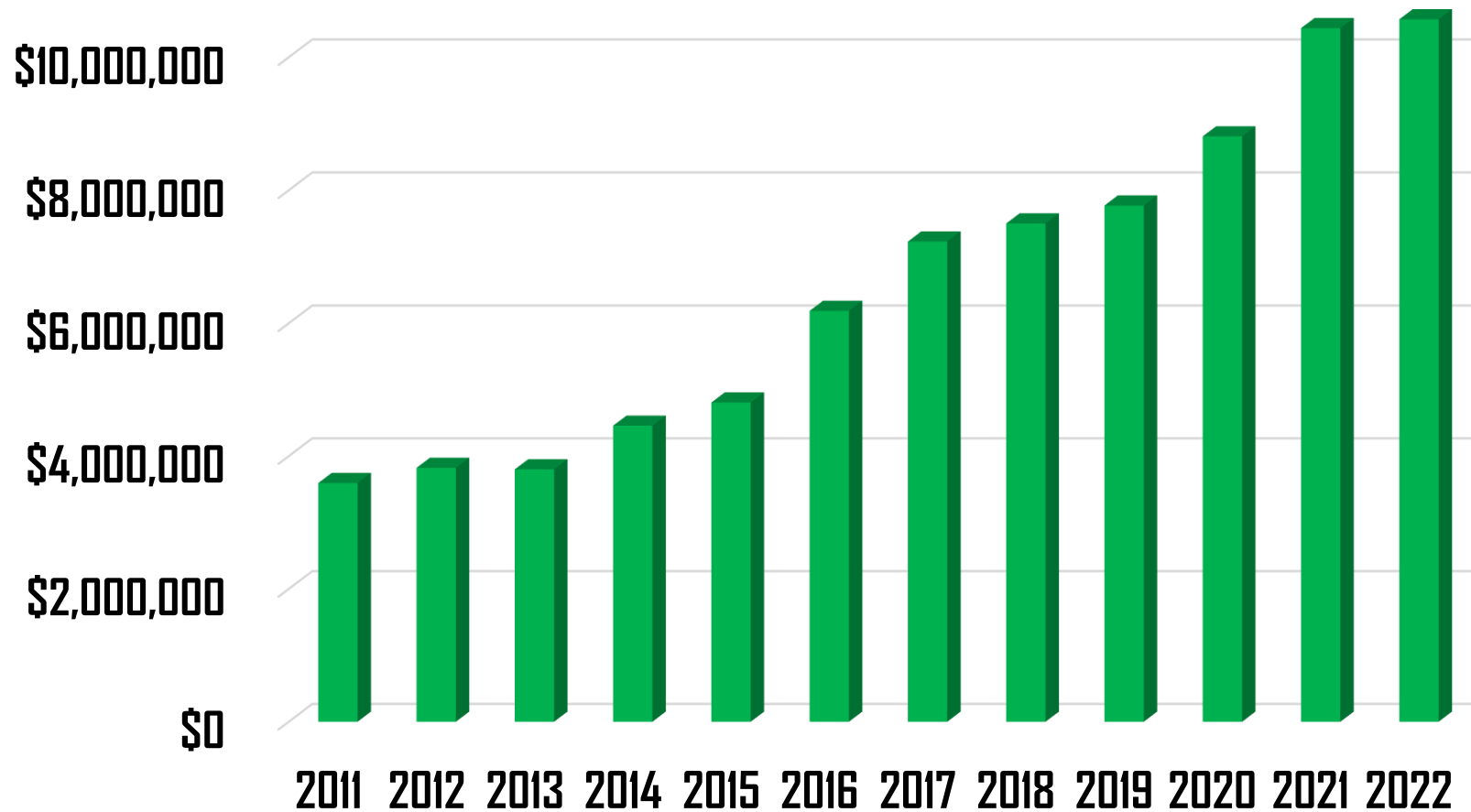
# 4 YEAR GRADUATION RATES



# 6 YEAR GRADUATION RATES

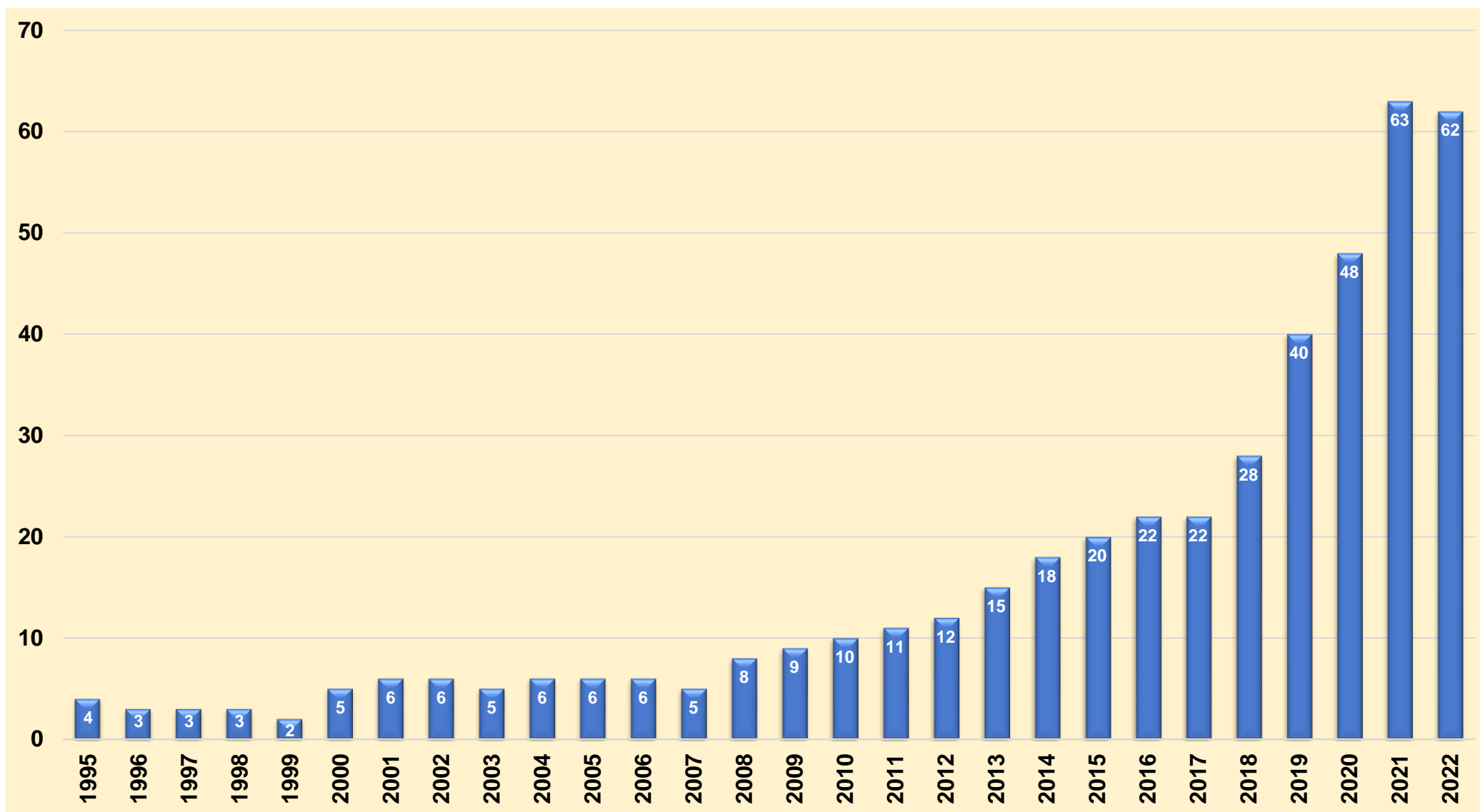


# RESEARCH AWARDS TO SDSU ENGINEERING FACULTY



**Nine NSF Career and NSF ERI grants in 2019-2022,  
including eight of those during last year**

## Enrollment in Engineering SDSU-UCSD Joint Doctoral Program



# Community & Communication

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## SPARK Interns Summer 2022

Rising HS Seniors were selected to be in a 6-week paid summer internship at Sanford Burnham Prebys. These students will assist in current research focused on STEM cell and STEM cell treatment therapies.

- San Diego & Imperial Valley MESA







# College of Engineering

## Troops to Engineers

### Mission:

T2E Supports the career development of student veterans majoring in Engineering & Computer Science.

For AY 22-23 Troops to Engineers will provide service to approx. 260 Students.

### Goals:

- ❖ Prepare students for what lies beyond their Military experience.
- ❖ Establish professional networks to benefit their career goals.
- ❖ Ease the transition from military to student to civilian career.
- ❖ Maintain 100% placement rate of actively participating Students

### How we do it:

T2E partners with Industry leaders, faculty, and staff to provide high quality and unique opportunities for personal and professional growth.

### Partnerships

- “Big 3” Supporters: Booz Allen Hamilton, Boeing, Northrup Grumman
- Dept of Navy ( NAVAIR, NAVFAC, NAS North Island, Miramar, NIWC, Etc.)
- Qualcomm, GALT Aero, SAME San Diego & Orange Posts, Etc.
- Always in search of opportunities for Faculty involvement with program and events

### Partner Engagement

#### Fall Semester

- 2 Facility Tours Scheduled – General Atomics & NAVAIR
- Industry Professional Panels for all Engineering Disciplines
- Networking Events hosted by partners
- Exclusive Interview & Hiring Events for T2E Students
- BAH/T2E Senior Design Day sponsor
- Student Awards
- Grad Student support w/ Research assistant search

### ENGR 101 Sec. 3

- Offered to all Student Veteran Engineers
- Connects program partners with Student Veteran Engineers, CS, MIS
- Enhancing the capabilities of Veteran Students by working on their Networking skills, professional development through mentorship, & interview skills with industry professionals.



# DEI Committee Update and Agenda for Fall 2022

- **The Department DEI plans:**
  - CCEE and ECE have Senate approved DEI plans (to be displayed on the department websites)
  - ME and AE will be submitting revised versions of the plan to the Senate in early Fall
- **University DDI Council deliberating on a budget/College to implement DEI Plan**
- **DEI Agenda items to be undertaken in 22-23:**
  - Increase URM students in the grad program (Grad Info Day) – looking forward to your participation
  - Building an inclusive climate in the classroom (Speakers/Tutorials/Workshops)
    - First Speaker Dr. Susan Lord on 8/15 (Host: Dr. Karen May-Newman)
  - Creating an inclusive and collegial climate in the College
- **Ideas on Strengthening Collegiality and Inclusivity being deliberated:**
  - *Celebrating promotions/specific years of service, retirements*
  - *Celebrate staff contributions and accomplishments*
  - *Dean's BBQ*
- **Application for “silver category” designation in DEI at the ASEE**

# A Year in Review | College Communications

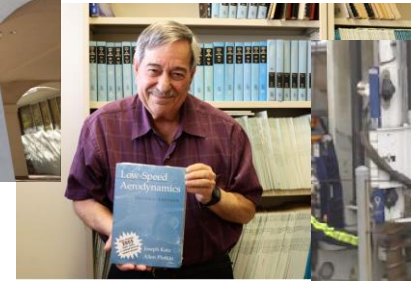
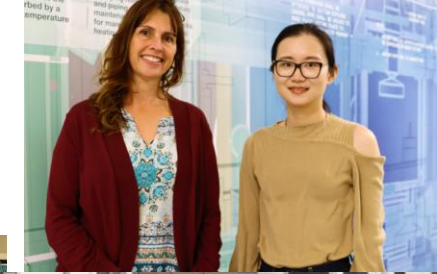
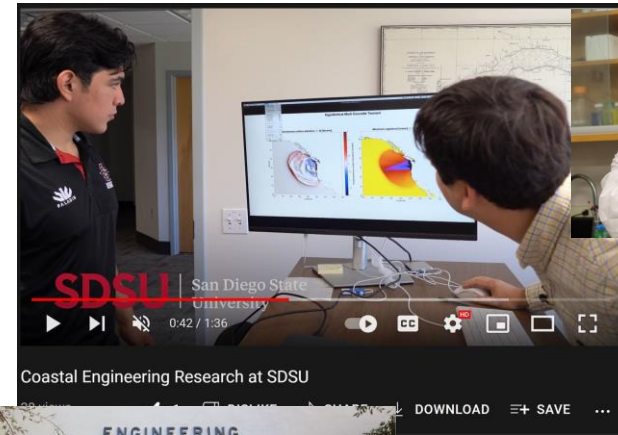
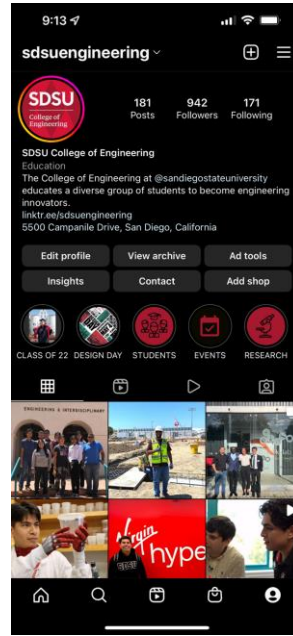
Social Media Platform	September 2021	August 2022
<b>LinkedIn</b>	0	2,625
<b>Twitter</b>	0	144
<b>Instagram</b>	0	942
<b>Facebook</b>	710	827
<b>YouTube</b>	0	34

## Events and News in Review

Senior Design Day 2022  
 Explore SDSU  
 Peggy Johnson Talk  
 Albert W. Johnson Lecture  
 MESA Graduation Ceremony  
 Commencement 2022

## Moving Forward

Departmental Website Launches (4 pending)  
 Email Newsletters (100,000 + emails)  
 Video Profiles (7)  
 Photo Library (5,000 + Photos)  
 Student Org. Features (31)  
 News Coverage (4)





# Development Update

## College Goal for 2022-2023 - \$4.5M

### Faculty/Staff Role

- Identify New Corporations
- Identify Alumni
- Identify Friends

### Priorities

- Faculty Support
- Scholarship
- Diversity, Equity & Inclusion
- Stewarding – Demonstrating Meaningful Impact

### Why We Do What We Do

*Keith London*

Thank you to all faculty and staff for all you do. We're able to be successful because of YOU!

### Online Efforts

Endowed Funds Link:

<https://www.engineering.sdsu.edu/give/endowed-funds>

Endowed Scholarships Link:

<https://www.engineering.sdsu.edu/give/endowments>

Giving Links:

<https://www.engineering.sdsu.edu/give/links>

Planned Giving:

<https://www.engineering.sdsu.edu/give/planned-giving>

### Development Team

**Kate Carinder**, Senior Director of Development

**Chris Larkin**, Director of Development

**Samantha Mejia**, Coordinator

# CoE

# Constitutions and Bylaws

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# Constitution and Bylaws

## CONSTITUTION

1. Name and Standing
2. Vision and Mission
3. Academic Departments

## BYLAWS

1. Organization
2. Faculty Assembly
3. Standing Committees
4. Student Honors and Awards
5. Workload ([Appendix A](#))
6. RTP Criteria ([Appendix B](#))
7. Voting
8. Parliamentary Authority
9. Implem., Amendment and Repeal

## APPENDIX A. Workload Allocation Policy

1. Normal work assignment
2. Faculty teaching workload
3. Assigned time (AT) definition
4. AT for research
5. AT for pedagogy/service
6. Teaching load for *new* faculty
7. AT reconsiderations

## APPENDIX B. RTP Criteria

# BREAK

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# Research & Graduate Program Update

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# Research - Proposal Submission

Department	Total #T/TT (2021/22 AY)	# T/TT with one or more proposals in FY 2022	# Proposals		
			FY 2021	FY 2022	FY 2022 (% of FY 2021)
AE	12	8	31.2	14.23	45.6
CCEE	19	13	34.22	23.69	69.3
ECE	19	14	41.57	48.84	117.5
ME	21	21	65.76	51.07	77.9
Dean's Office	N/A	N/A	2.00	4.00	200.0
<b>Total</b>	<b>71</b>	<b>56</b>	<b>174.75</b>	<b>141.83</b>	<b>81.2</b>

# Research – # Awards

Department	Total #T/TT (2021/22 AY)	# T/TT with one or more awards in FY 2022	# Awards		
			FY 2021	FY 2022	FY 2022 (% of FY 2021)
AE	12	6	8.00	11.25	140.6
CCEE	19	12	14.99	16.97	113.9
ECE	19	10	12.41	22.00	177.3
ME	21	15	21.50	20.25	94.2
Dean's Office	N/A	N/A	5.00	4.00	80.0
<b>Total</b>	<b>71</b>	<b>43</b>	<b>61.90</b>	<b>74.47</b>	<b>122.1</b>

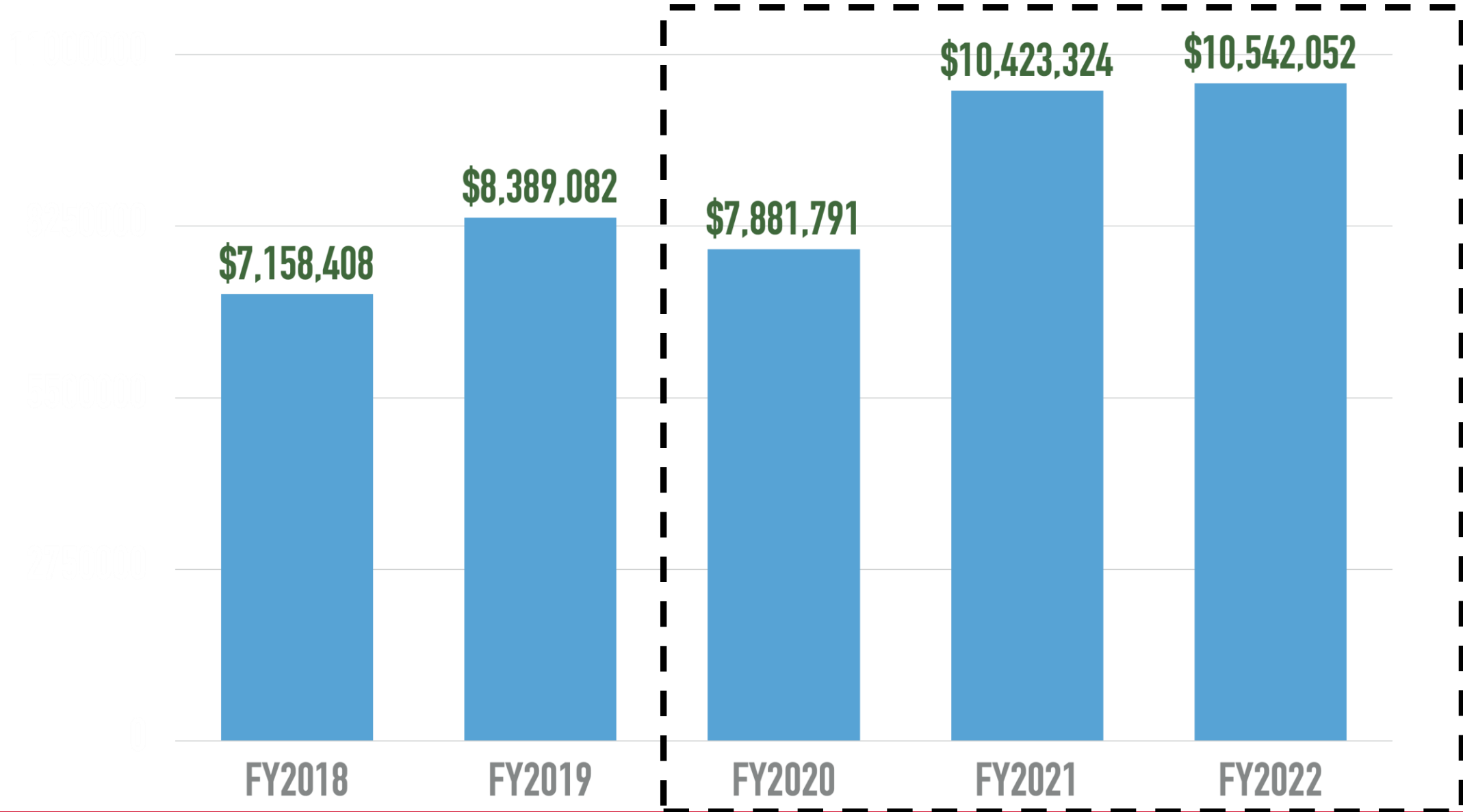
# Research – \$ Awards

Department	Total #T/TT (2021/22 AY)	# T/TT with one or more awards in FY 2022	\$ Awards		
			FY 2021	FY 2022	FY 2022 (% of FY 2021)
AE	12	6	\$996,866	\$1,799,602	180.5
CCEE	19	12	\$2,920,543	\$2,570,577	88.0
ECE	19	10	\$3,079,144	\$2,352,142	76.4
ME	21	15	\$2,866,751	\$3,553,663	124.0
Dean's Office	N/A	N/A	\$560,000	\$266,069	47.5
<b>Total</b>	<b>71</b>	<b>43</b>	<b>\$10,423,324</b>	<b>\$10,542,052</b>	<b>101.1</b>

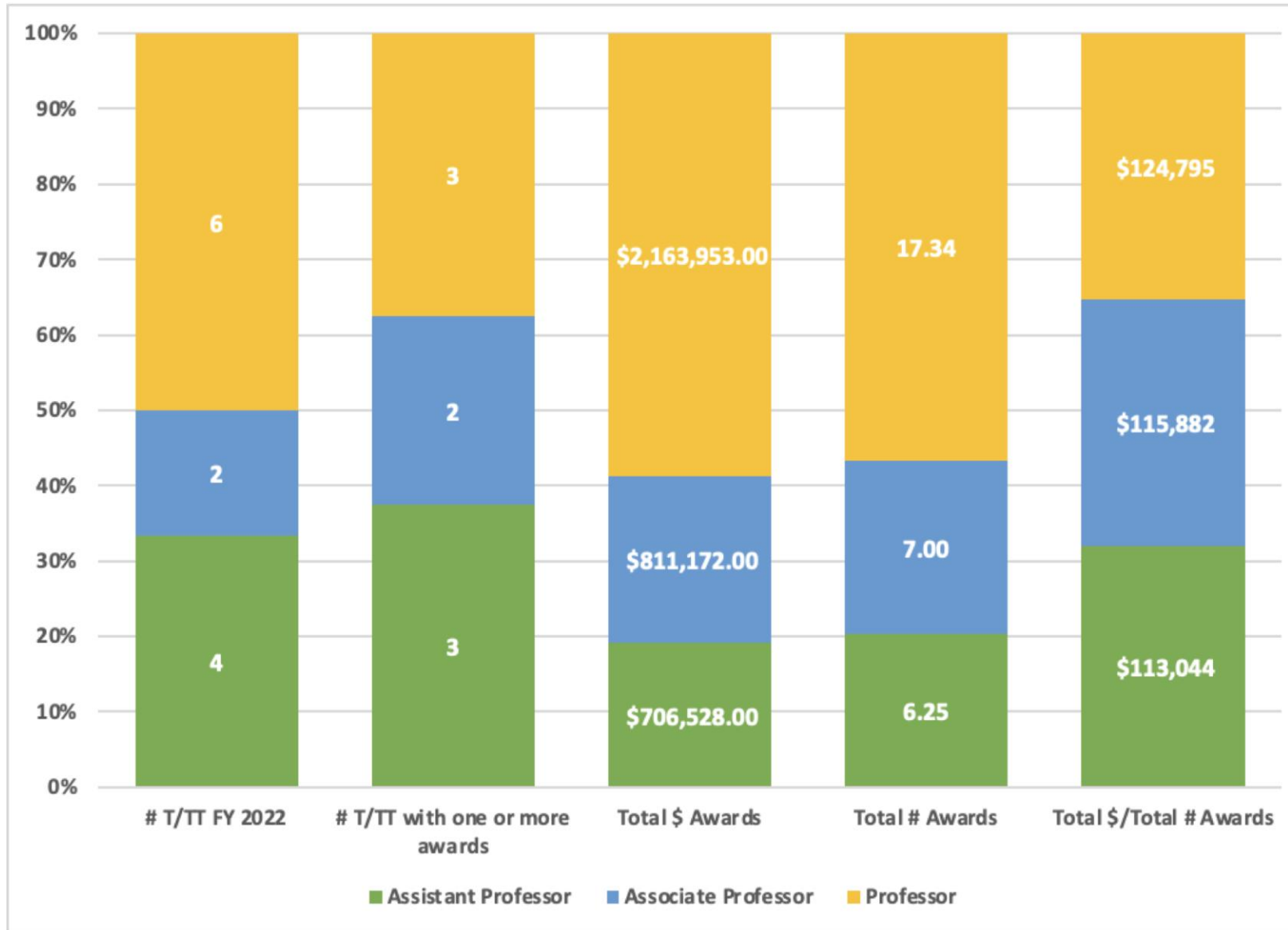
# Research – \$ Awards per T/TT

Department	Total #T/TT (2021/22 AY)	# T/TT with one or more awards in FY 2022	\$ per T/TT	
			All T/TT	T/TT with one or more awards
AE	12	6	\$149,967	\$299,934
CCEE	19	12	\$135,294	\$214,215
ECE	19	10	\$123,797	\$235,214
ME	21	15	\$169,222	\$236,911
Dean's Office	N/A	N/A	N/A	N/A
<b>Total</b>	<b>71</b>	<b>43</b>	<b>\$148,480</b>	<b>\$245,164</b>

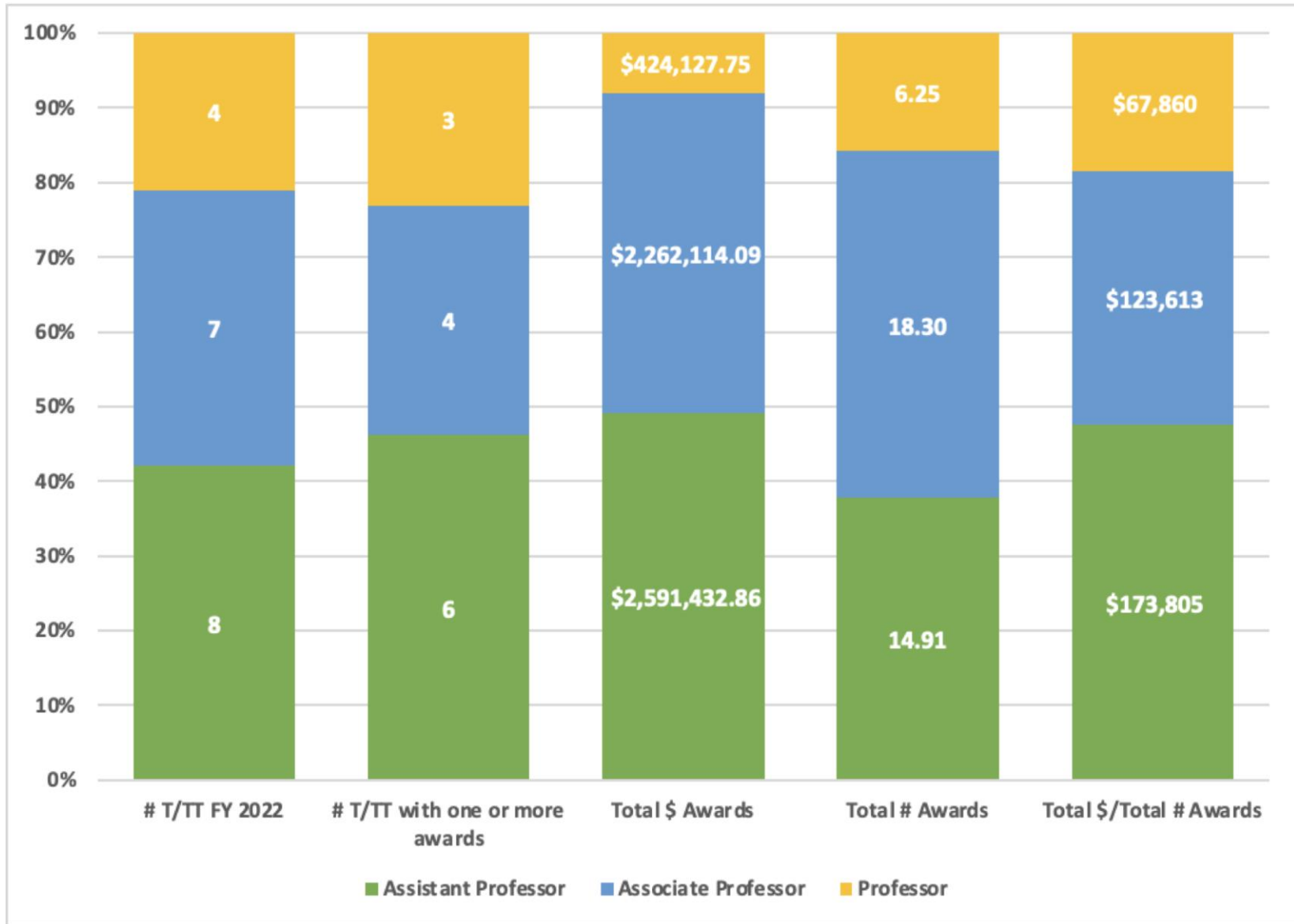
# Total \$ Awards for COE FY 2018-FY2022



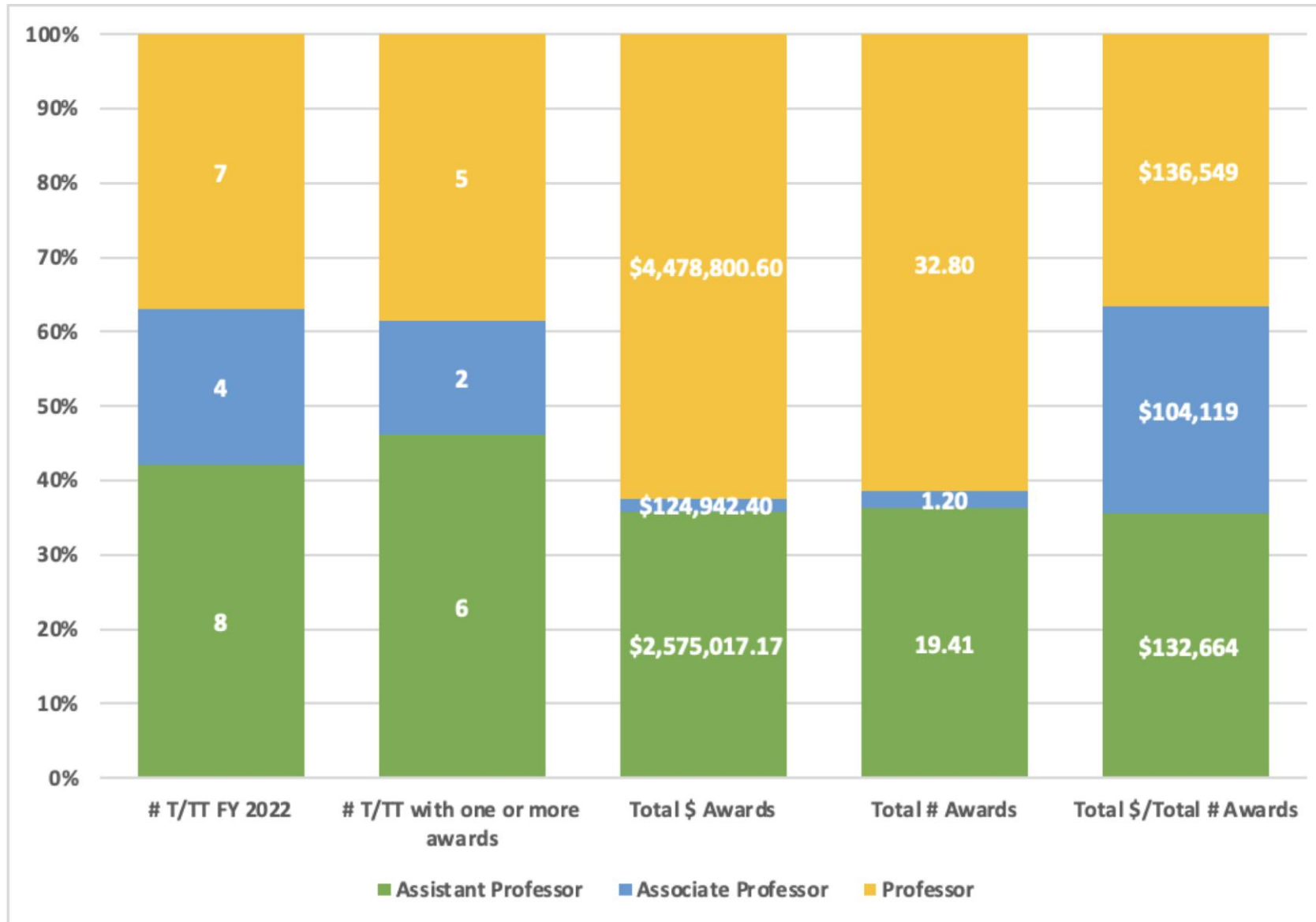
# Awards for AE FY 2020-FY2022



# Awards for CCEE FY 2020-FY2022



# Awards for ECE FY 2020-FY2022

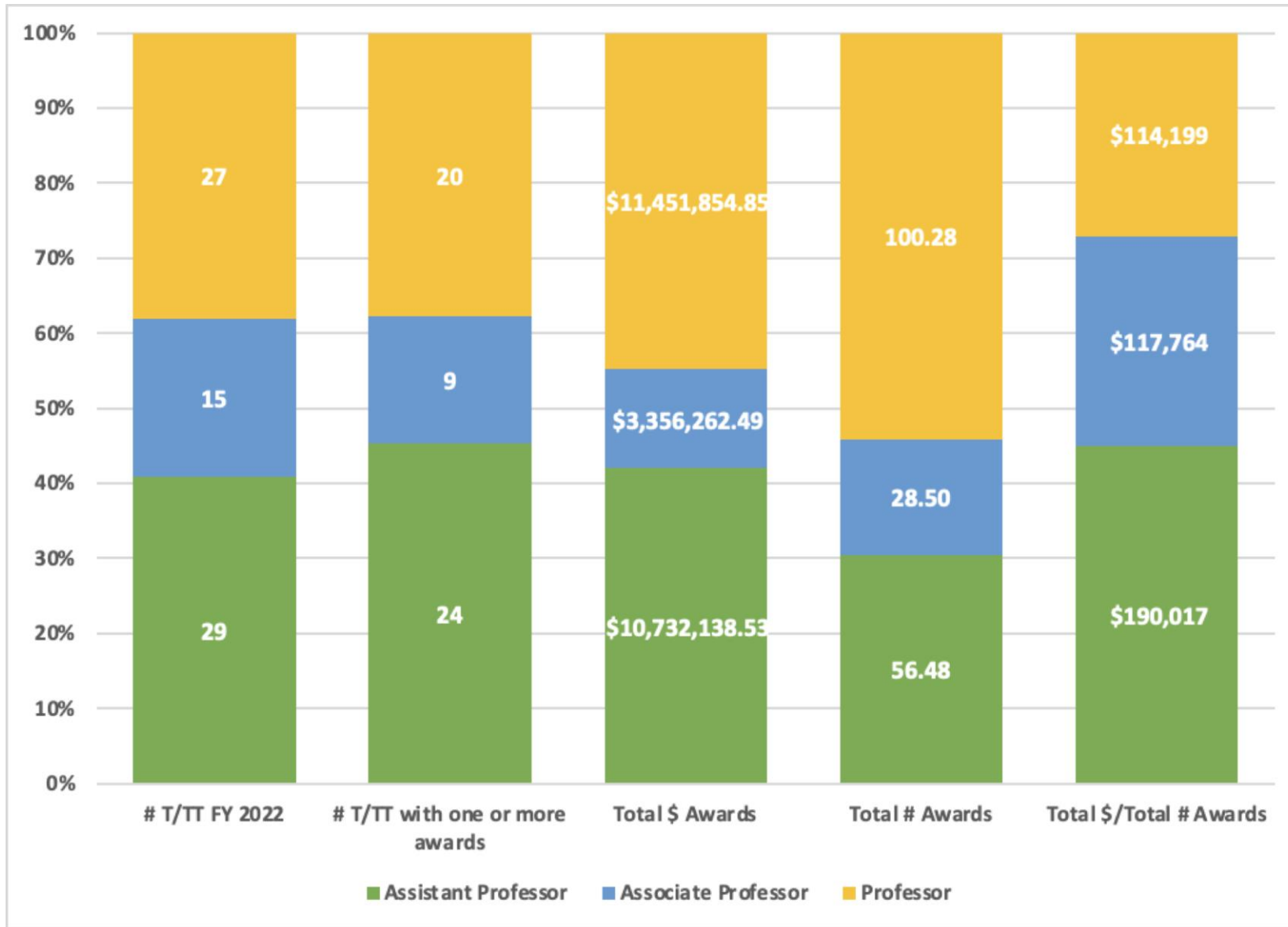




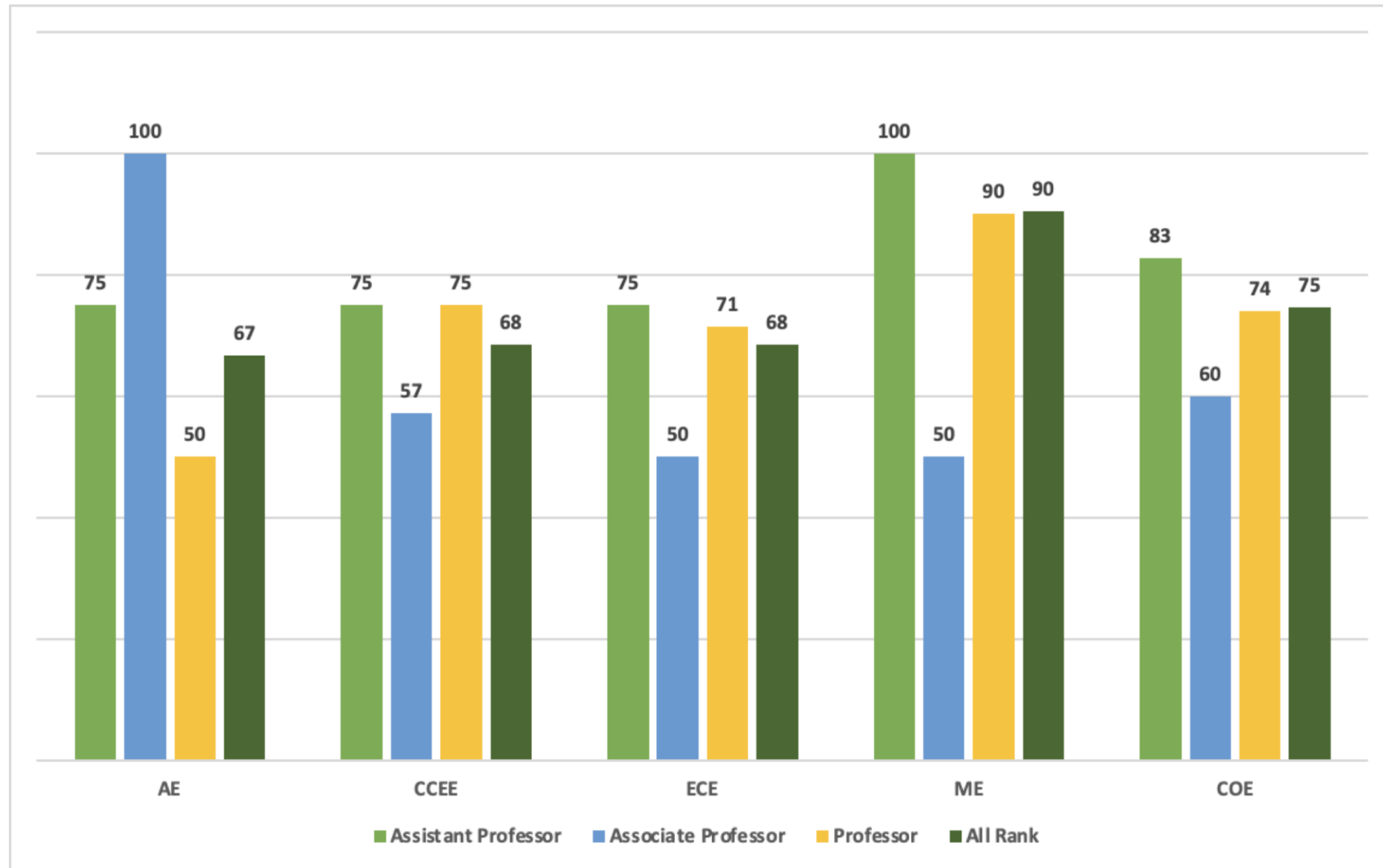
# Awards for ME FY 2020-FY2022



# Awards for COE FY 2020-FY2022



# # T/TT with one or more awards FY20 to FY22 (% of Total)



## Research Advancement - Services & Programs

### WORKSHOPS

#### 1) Grants & Research Enterprise Writing (GREW)

The GREW Fellowship is a five-week program that teaches early-career faculty members how to communicate effectively with grant officers, develop successful proposals, and share their research with media and other stakeholders.

#### 2) Graduate Fellowship Workshops

Graduate Fellowship Training is designed to improve the participation and competitiveness of graduate students, especially Joint Doctoral Program students, in securing sponsored fellowships in support of their research programs. The workshops are specifically focused on NIH F31 and NSF GRFP submissions.

#### 3) Speaker Performance Excellence in Academic Communication (SPEAC) Workshop

Developing an ease with describing scientific insights to a variety of audiences can be a critical component of developing successful scholarly programs. SPEAC uses real-life examples and proven practices to support faculty in their pursuit of communication excellence.

#### 4) NSF CAREER Workshop

A summer adjunct to the GREW Fellowship, this 4-week program helps PIs hone their grant-getting skills specific to the unique requirements of the prestigious NSF CAREER program.

#### 5) NIH K Award Workshop

The NIH K awards provide a mentored research training experience for senior postdoctoral fellows or junior faculty-level candidates. These awards are designed to promote career development and move recipients toward independent research efforts, enabling them to compete for major grant support. SDSU faculty members who have been recipients of this prestigious award will be discussing their K award experiences and offering tips at this workshop.

### PROPOSAL DEVELOPMENT SERVICES

#### 1) Pre-submission Proposal Review

By using Rapid Critical Review (a one-day intra-campus review panel) and supporting formal external review by previously funded scholars from other universities, pre-submission reviews enhance the competitiveness of proposals being submitted for extramural funding.

#### 2) Graduate Student Editing Services

Graduate student editors from the SDSU Writing & Rhetoric Department are available to review proposals for grammar and clarity.

#### 3) Subject Matter Expertise

For applications of significant scale and impact, consider reaching out to Research Advancement to discuss a customized services plan that could include grant-writing, evaluation, graphic design, or other specific needs that will enhance proposal competitiveness.

## Research Advancement - Services & Programs

*\* continued \**

#### 4) Non-Technical Grant Writing

A non-technical grant writer is available to develop, write and manage supplementary documents – budget justification, data management plans, facilities, equipment & resources, etc. – which allows the PI to focus on the innovation and significance of the proposed research.

#### 5) Graphic Design Support for Proposals

Professional developed graphics and figures can increase proposal competitiveness. Research Advancement has developed a relationship with a graphic designer who excels at design work meant for proposals.

### OTHER SERVICES

#### 1) Research Advancement Office Hours

Members of the Research Advancement team are available during open-door-style office hours every Thursday from 3 to 4 pm on the patio of Oggi's Pizza.

#### 2) The Implementation Group

TIG is a proven research development firm specializing in strategic positioning, proposal development, and team science to increase client competitiveness for external funding. TIG services focus on strategic consulting, opportunity assessment, proposal development, technical assistance, proposal evaluation, and resubmission analysis.

#### 3) Teaming Opportunities & Development

This effort supports the development of interdisciplinary proposal teams. The goal is to support development of proposals that provide a problem-focused, solution driven perspective, allowing new ideas to form at the edges of interdisciplinary fields while advancing our knowledge of the world through high impact discoveries.

#### 4) Rising Stars Program

The Rising Stars Program recognizes national renown early-career faculty by inviting them to campus to share their cutting-edge research and career development strategies with the SDSU community over the course of a 2-day visit. This program provides a speaker honorarium and covers all travel expenses. *\*On hold until spring 2022 due to COVID\**

To connect with Research Advancement or to apply to receive support through any of these programs, please contact:

Nadia Campbell  
Director of Research Initiatives, Health Sciences  
[Ncampbell@sdsu.edu](mailto:Ncampbell@sdsu.edu)

John McMillan  
Director of Research Initiatives, Engineering & Physical Sciences  
[Jmcmillan@sdsu.edu](mailto:Jmcmillan@sdsu.edu)

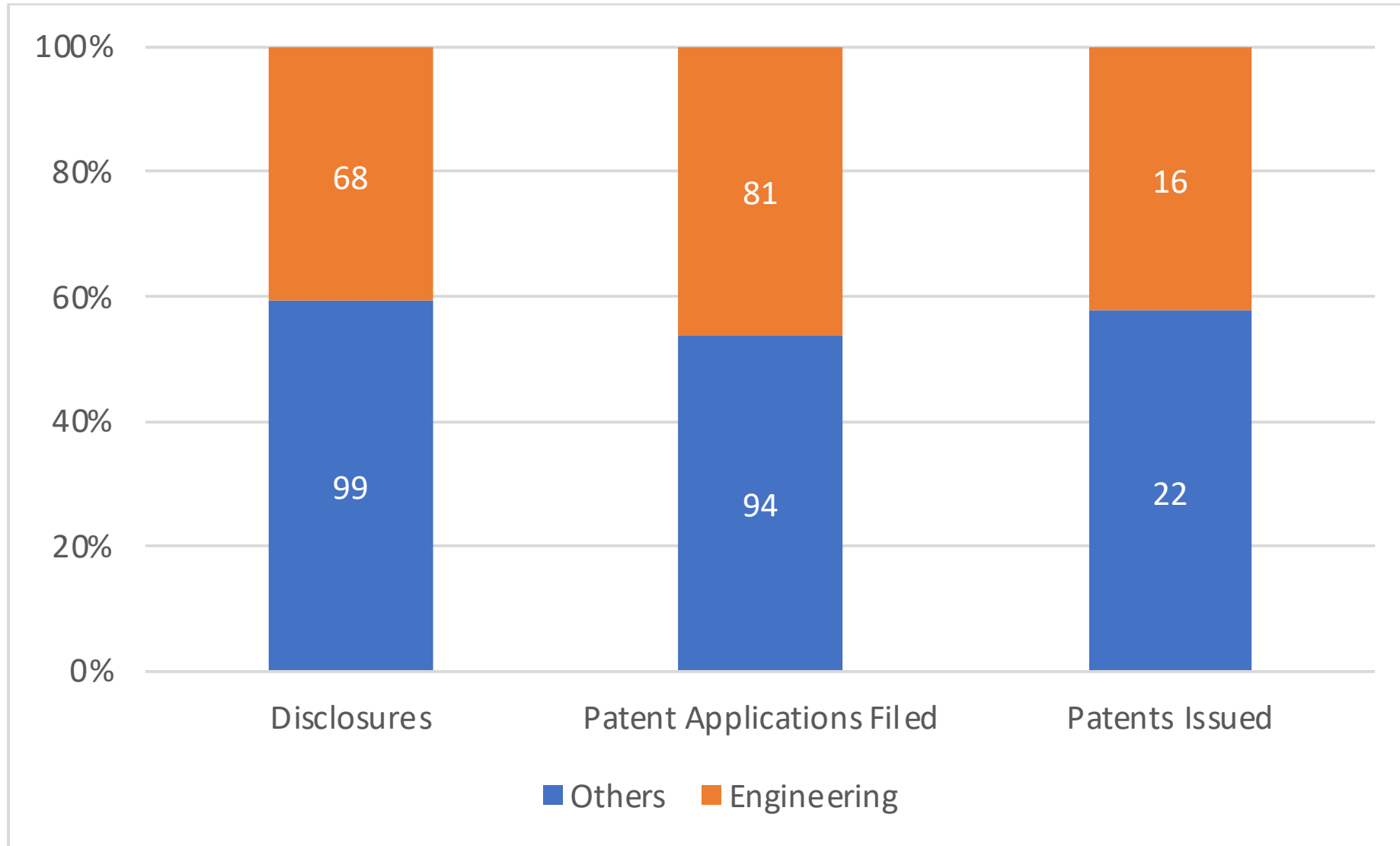
General inquiries: [researchadvancement@sdsu.edu](mailto:researchadvancement@sdsu.edu)



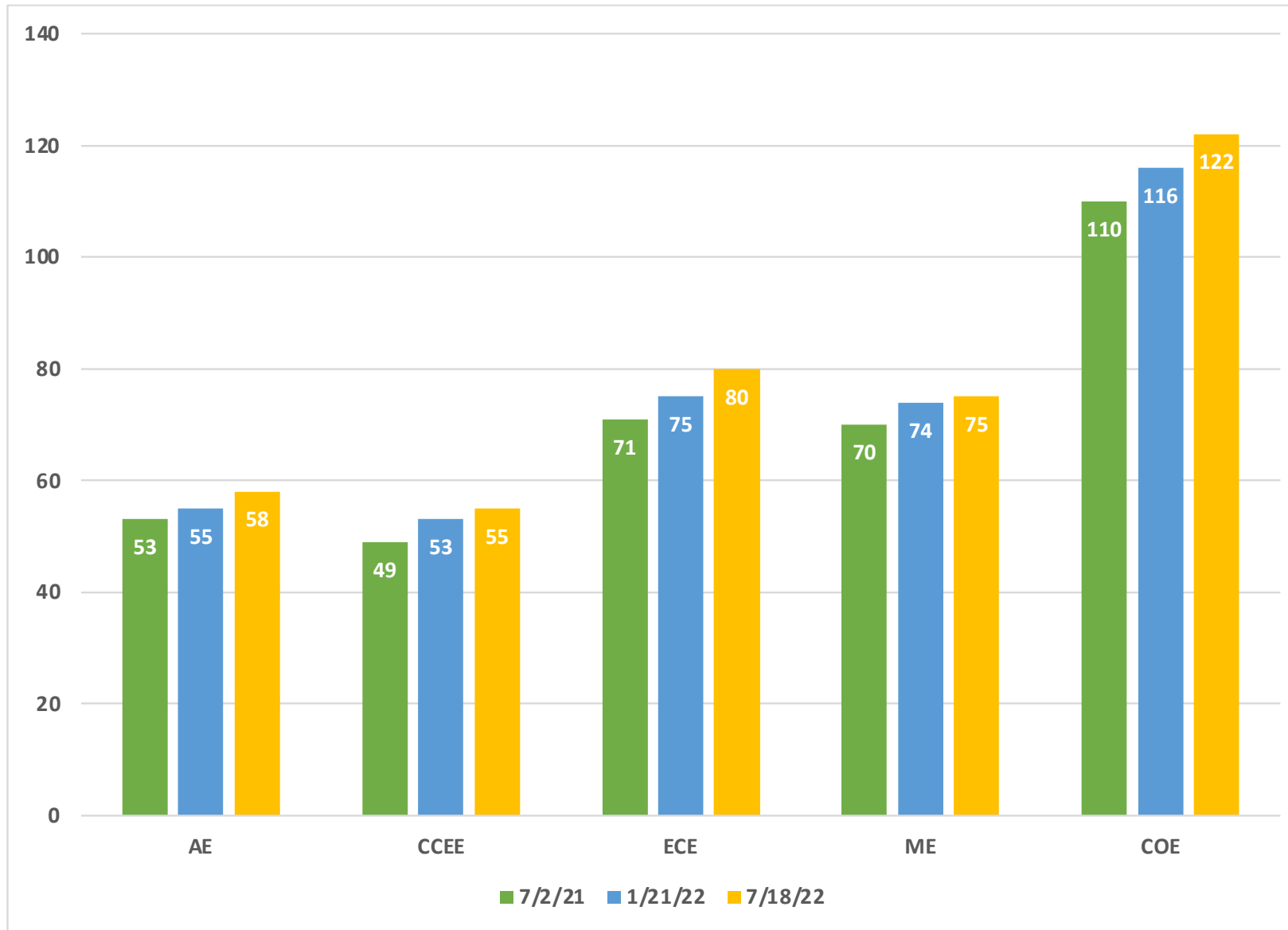
Scan code or visit  
[research.sdsu.edu/advancement](https://research.sdsu.edu/advancement)  
for more information

- **The Implementation Group (TIG)**
  - TIG was hired by the Provost office and DRI in fall 2020
  - Close to 18 engineering faculty members (mostly early-career faculty)
  - If you are interested in their service, please contact me
  - If you have used the services of TIG in the past, please respond to the recent survey you received about your experience with TIG
- **Hanover**
  - Through DRI – RA
  - On large proposals (> \$0.5M); collaborative proposals, e.g., centers

# Disclosures, Patent Applications Filed, and Patents Issued (FY 2018-2022)



# Scopus group h-index



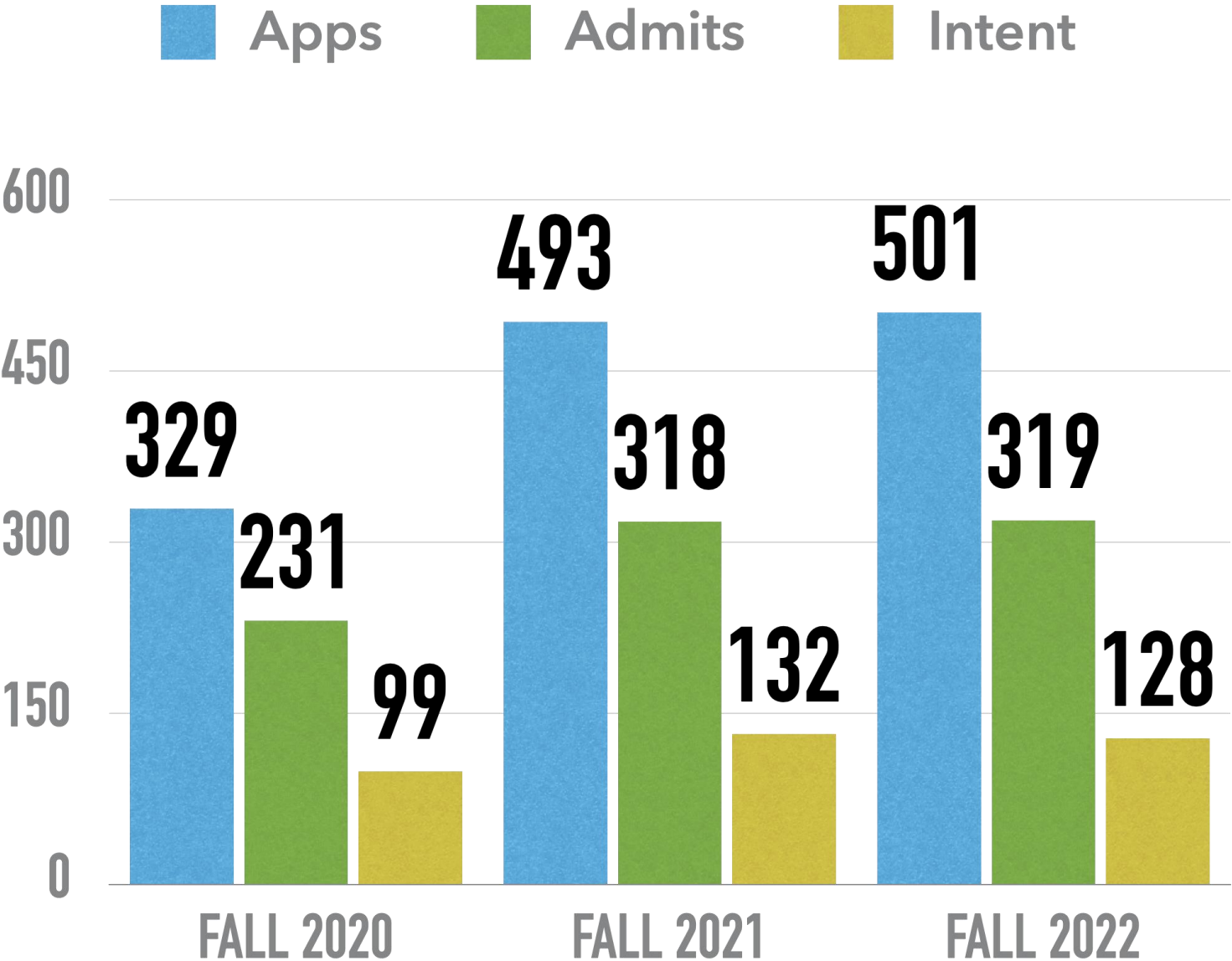
- **# enrollment in spring 2022 - 60**
- **# graduates in spring/summer 2022 - 9**
- **# continuing students - 51**
- **# admits for fall 2022 - 17**
  - 12 submitted intent to enroll
  - 8 may enroll in fall 2022 (assuming 70% yield)
- **Three students will transfer from other institutions**
- **Anticipated fall 2022 enrollment =  $51 + 8 + 3 = 62$**



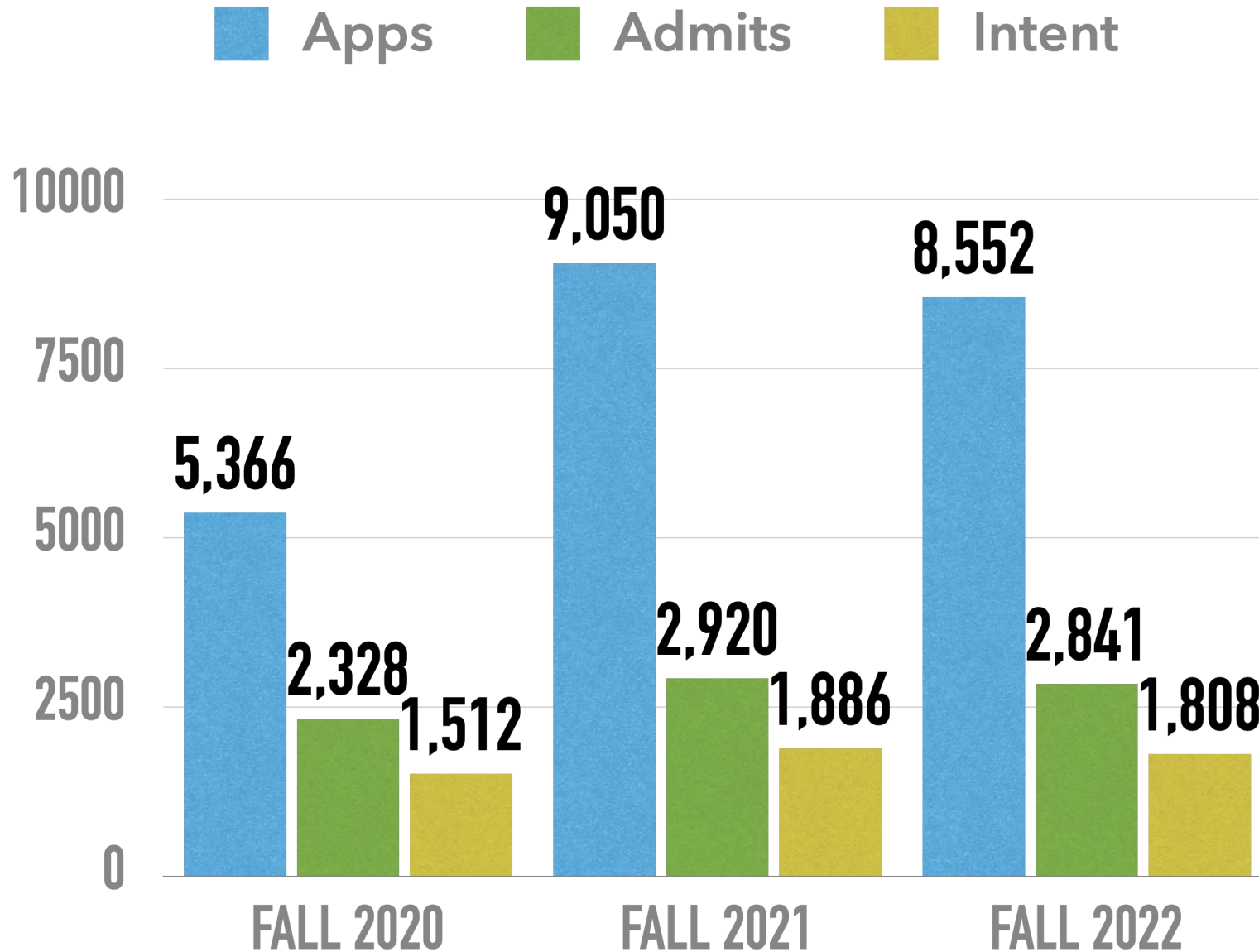
- It is challenging to acutely estimate the total enrolment for fall semester in advance
- The College will pay the tuition fees for JPD students above the College's allocation of waivers (30 for nonresident and 60 for basic)
- Faculty members will be invoiced in October

- **The stipend rate for Engineering JDP students is \$23,376 (negotiated with their union)**
- **The CGS is recommending to increase the stipend to \$30k for doctoral students**
- **In the College, we recommend increasing the stipend rate to \$25k for JDP students that will be hired as TAs and/or GAs**
- **On grants, some faculty members are hiring students on rates higher than \$25k**
- **All graduate students are strongly encouraged to secure health insurance for the 2022-23 AY**

Master's Programs (as of 7/29/22)



# SDSU Master's Programs (as of 7/29/22)

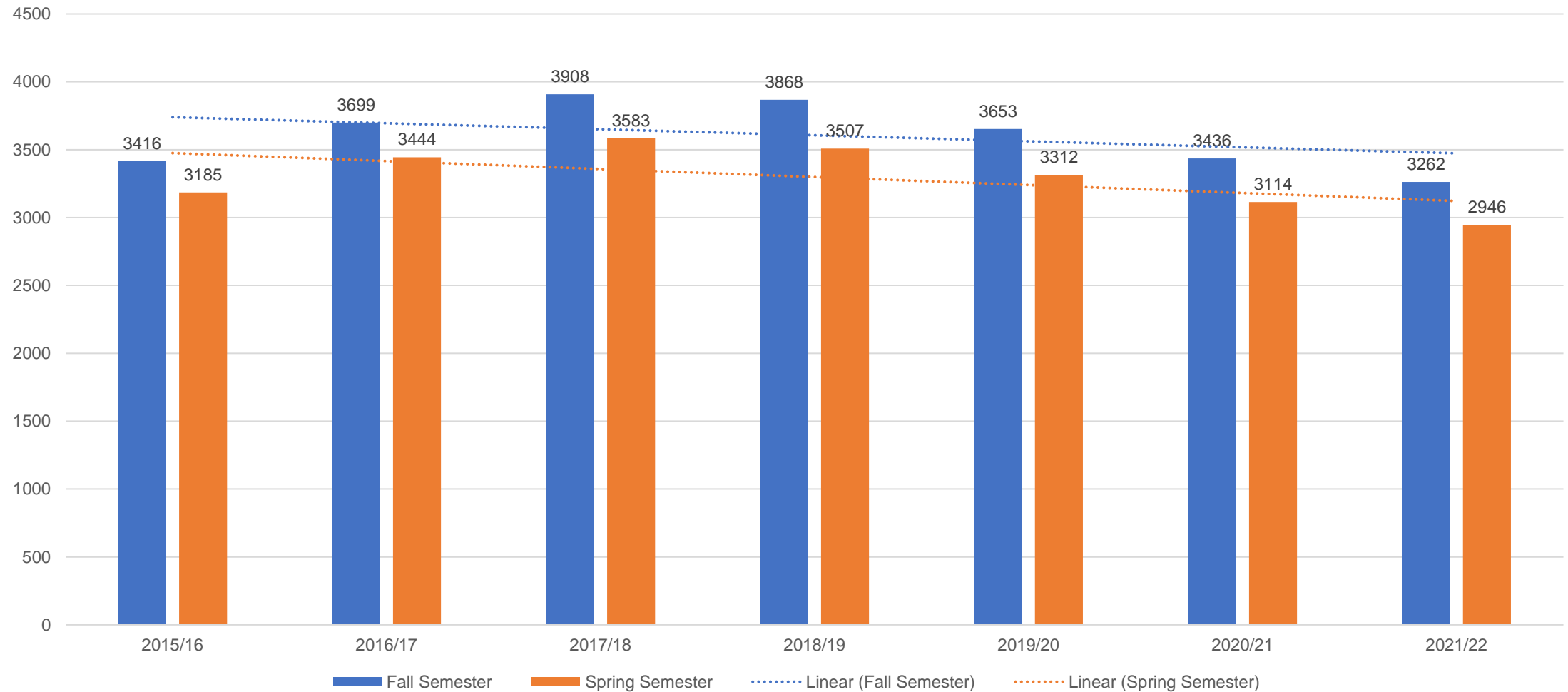


# Undergraduate Program Update

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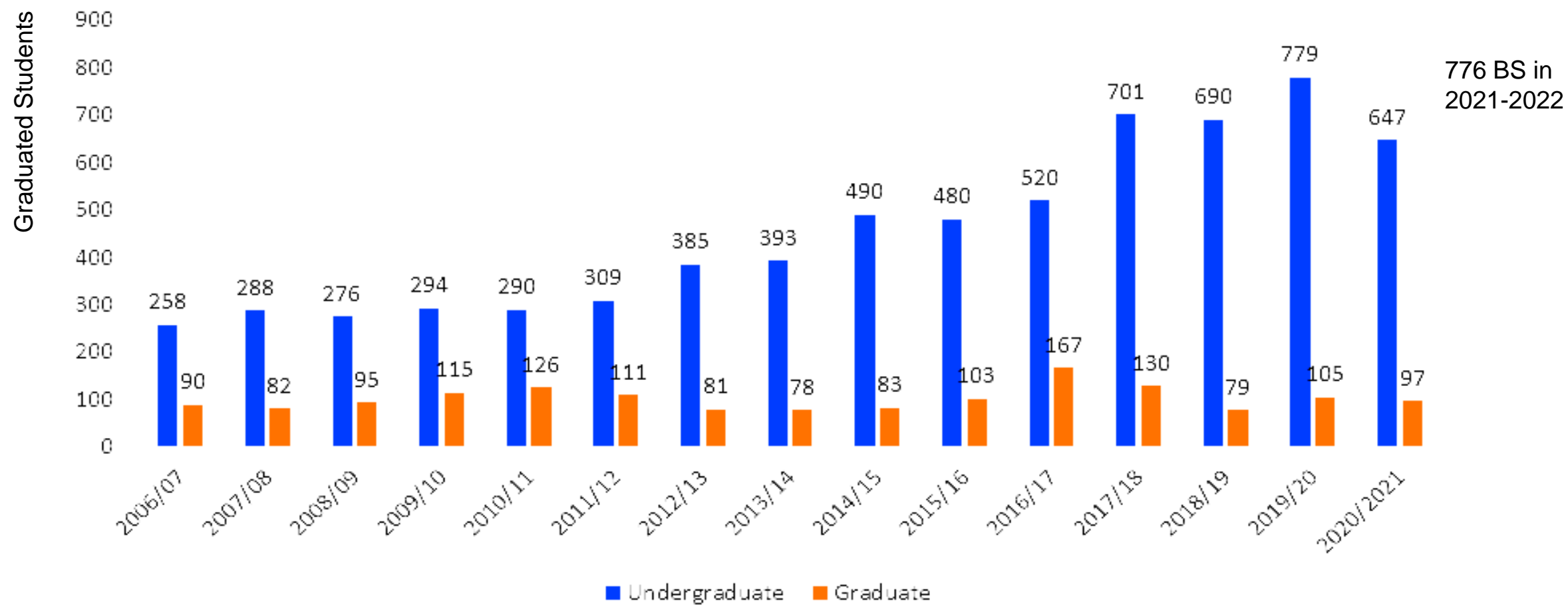


# Undergraduate Enrollment Trends



# GRADUATION TRENDS

COLLEGE of ENGINEERING - Graduation



# Fall 2022 Enrollment

Major	FIRST-TIME FRESH	FRESH	SOPH.	JUNIOR	SENIOR	Grand Total
AEROSPACE ENGINEERING	128	7	70	85	226	516
CIVIL ENGINEERING	97	9	67	97	260	530
COMPUTER ENGINEERING	93	7	55	61	158	374
CONSTRUCTION ENGINEERING	7	1	4	14	33	59
CONSTRUCTION MANAGEMENT	18	6	7	19	13	63
ELECTRICAL ENGINEERING	35	2	34	84	201	356
ENVIRONMENTAL ENGINEERING	34	3	21	30	70	158
MECHANICAL ENGINEERING	194	17	88	167	379	845
MECHANICAL ENGINEERING - BIOENGINEERING	31	1	24	17	62	135
MECHANICAL ENGINEERING 4+1 BS					8	8
MECHANICAL ENGINEERING 4+1 BS WITH MS BIOENGINEERING					1	1
<b>Grand Total</b>	<b>637</b>	<b>53</b>	<b>370</b>	<b>574</b>	<b>1411</b>	<b>3045</b>



# Graduations (2021-2022)

	Expected to Graduate	Graduated 2021	Graduated 2022	Expected 2023	Grand Total
AEROSPACE ENGINEERING	70	9	58	3	70
CIVIL ENGINEERING	192	70	111	11	192
COMPUTER ENGINEERING	93	33	55	5	93
CONSTRUCTION ENGINEERING	27	3	24	0	27
CONSTRUCTION MANAGEMENT	0	0	0	0	0
ELECTRICAL ENGINEERING	107	36	67	4	107
ENVIRONMENTAL ENGINEERING	39	14	23	2	39
MECHANICAL ENGINEERING	248	71	166	11	248
Total	776	236	504	36	776

# Admission Update Fall 2022

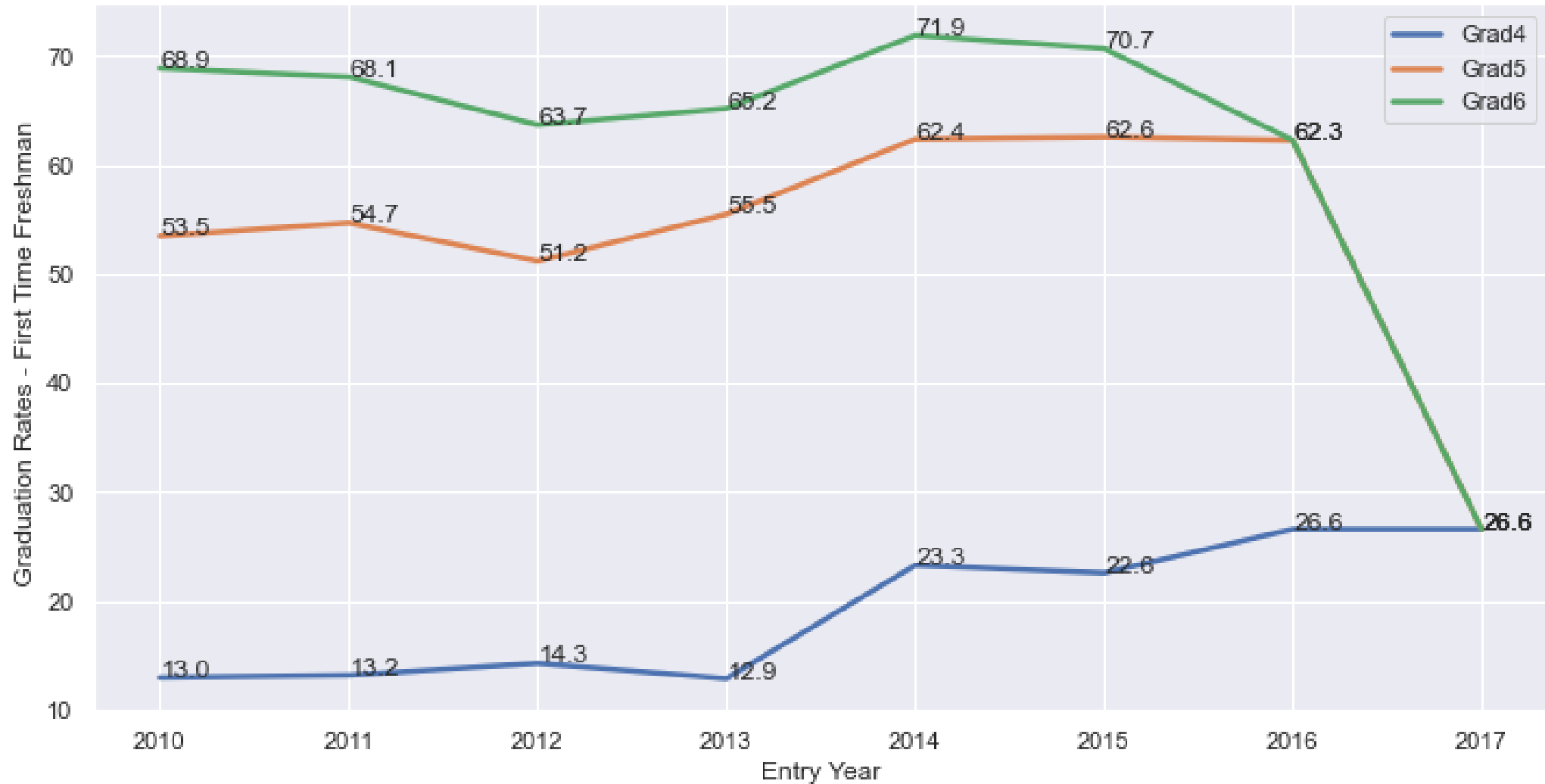
		2022 Predicted	2021 Enrollment	Difference	2022 Predicted	2021 Enrollment	Difference
ENG	Aerospace Engineering (09021)	125	97	28	22	23	-1
	Civil Engineering (09081)	87	71	16	53	55	-2
	Computer Engineering (09094)	90	64	26	24	34	-10
	Construction Engineering (09254)	7	7	0	7	3	4
	Construction Management (05017)	17	7	10	11	0	11
	Electrical Engineering (09091)	37	35	2	53	54	-1
	Environmental Engineering (09221)	30	25	5	16	8	8
	Mechanical Engineering (09101)	212	174	38	87	72	15
	Total	606	480	126	273	249	24
Grand Total		606	480	126	273	249	24

- **The California State University System (CSU) adopted the Graduation Writing Assessment Requirement (GWAR), requiring that all undergraduate students demonstrate competency in writing skills at the upper division level as a requirement for the baccalaureate degree within the California State University System (CSU).**
- **WPA which was used as a first step in assessing competency in writing skills at upper division is discontinued.**
  - If WPA =10, Students did not have to take an upper division writing course
  - If WPA = 8 , Students had to take an upper division writing course (RWS 390W, RWS 305W etc.)
  - WPA  $\leq 6$  , Students had to take an additional writing course (RWS 280, RWS 281)
- **Hidden Units existed in our MAP.**

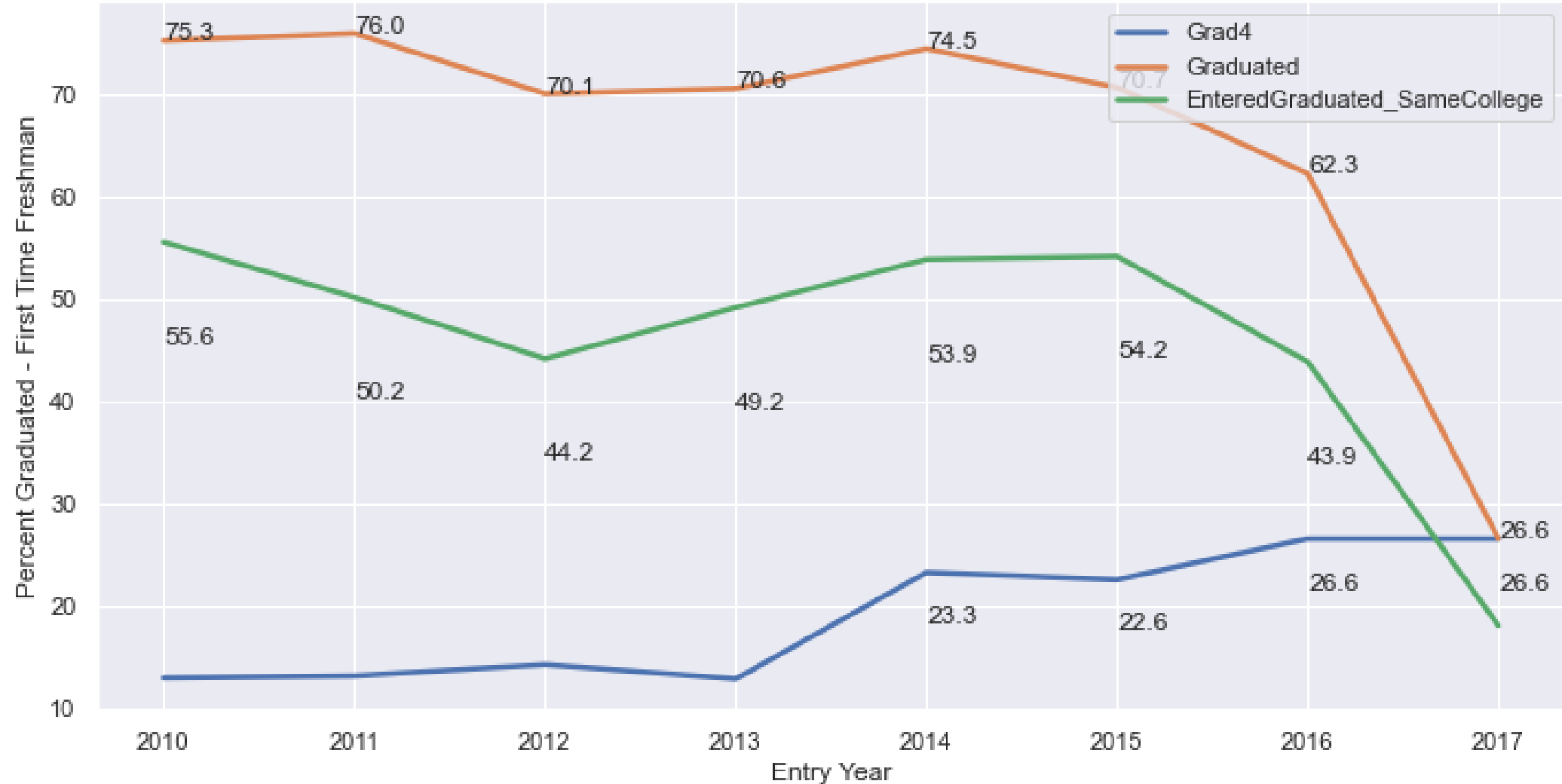
# GWAR College Plans

- **For students graduating in 2022-2023 academic year, we requested a waiver.**
- **Future plan :**
  - Engineering has several lab and senior design courses where students learn technical report and research paper writing from engineering professors.
  - The only way we can keep the programs at 120 units and satisfy GWAR requirement is to redesign one or more engineering courses as an upper division writing course.
    - Senior Design
    - A set of lab courses
  - Need a committee to champion this course redesign. This is a priority for every curriculum committee in the college.

# College Graduation



# College Graduation

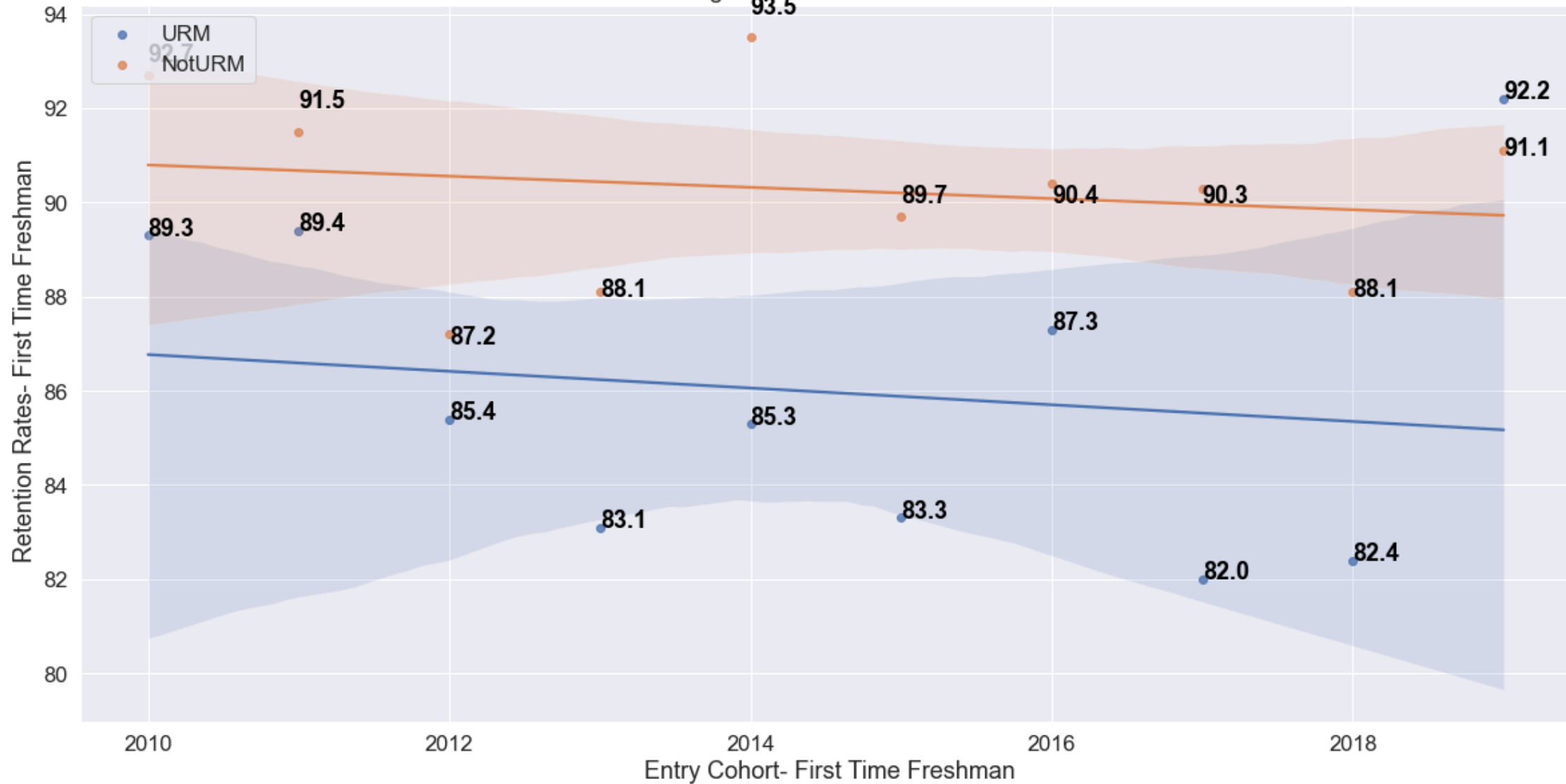


# Achievement GAP Metrics

- **We employ the following metrics at college, major and course level**
  - Retention Rates
  - Graduation Rates
  - DFW rates (URM, Pel Eligible, FirstGen, Gender)
  - Average GPA (URM, Pel Eligible, FirstGen, Gender)
- **While we work and improving student's success across the college, we are also working on addressing the achievement gaps between student demographics.**

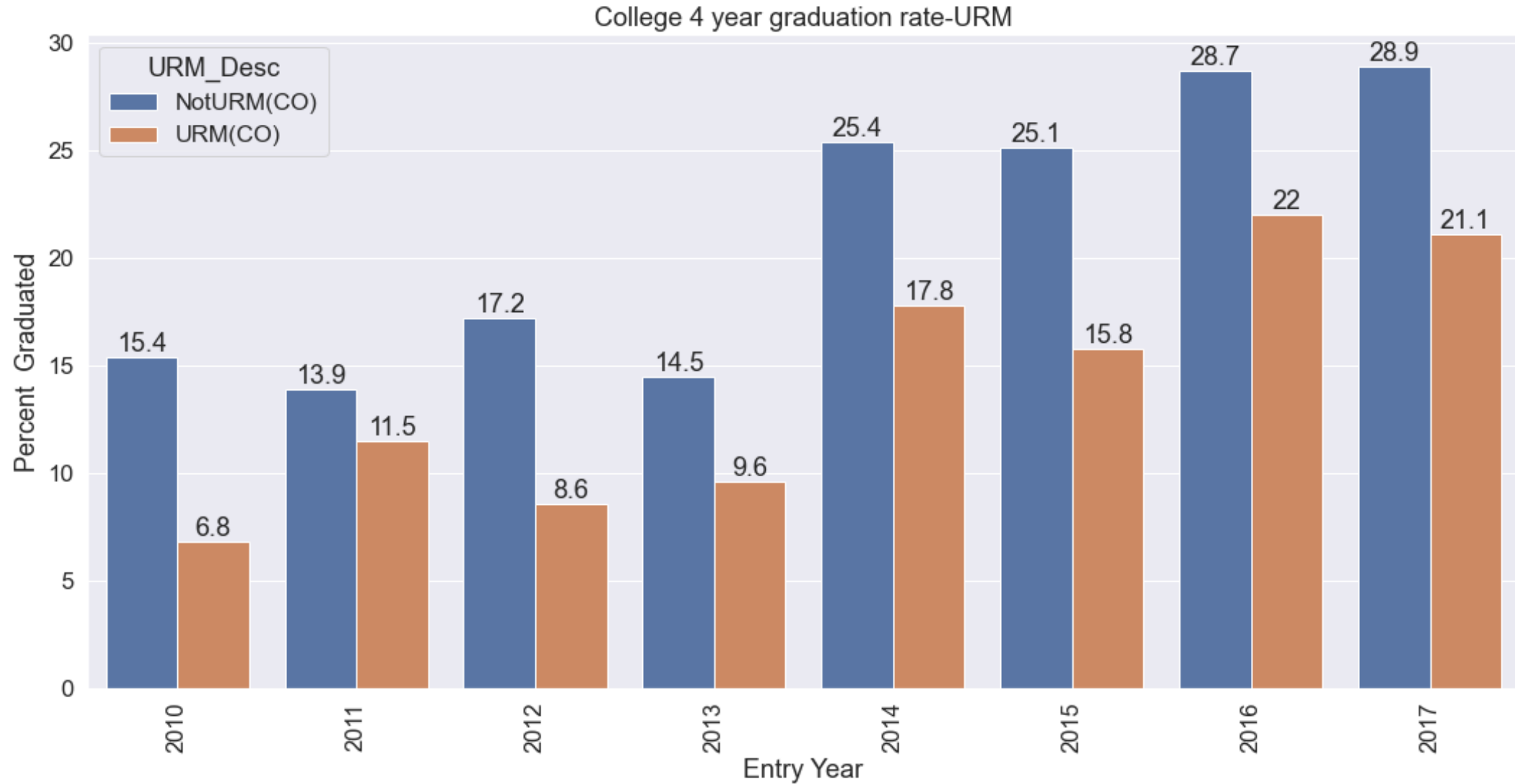
# Retention Rates

College Term 5 Retention Rates

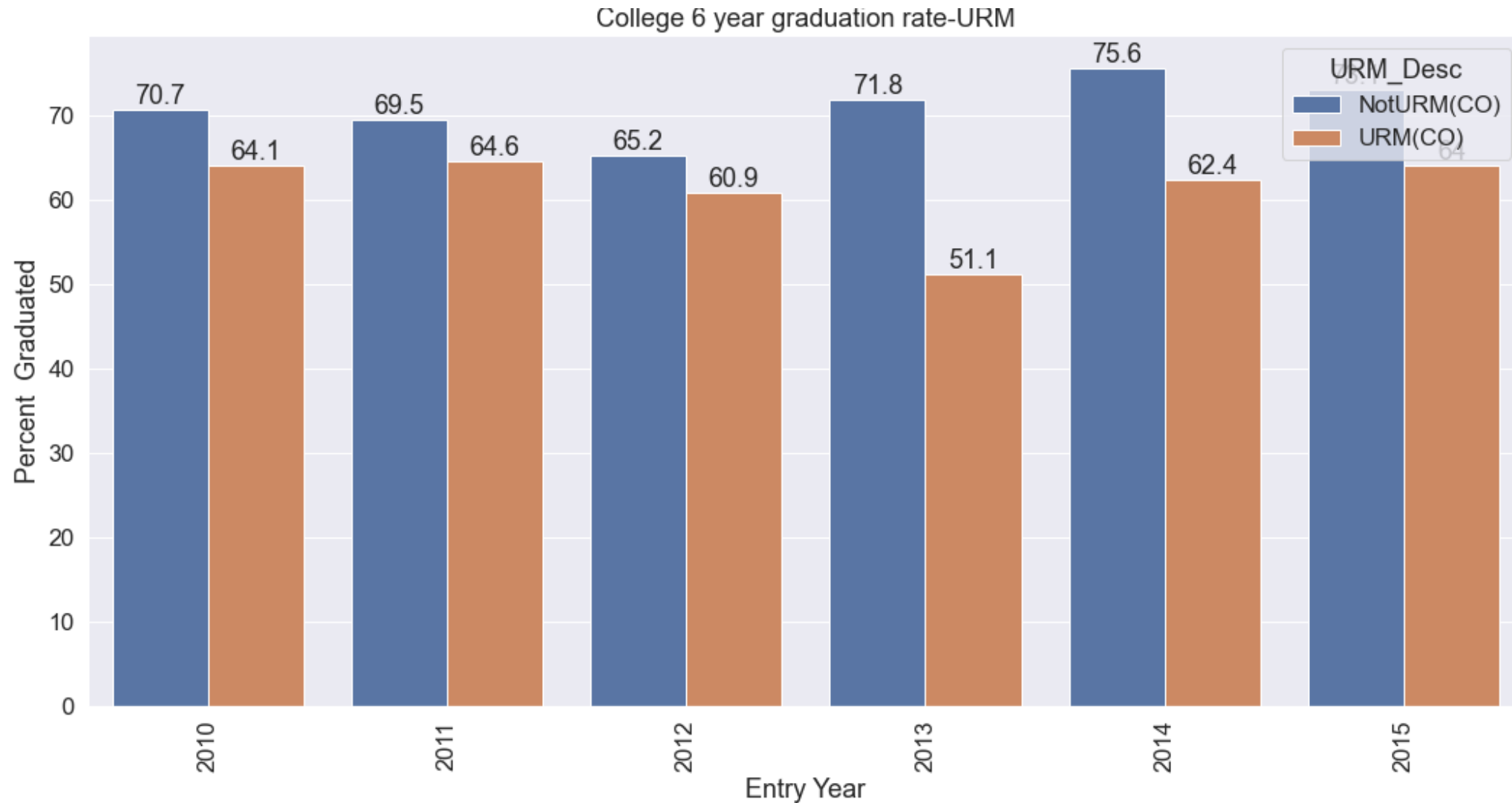




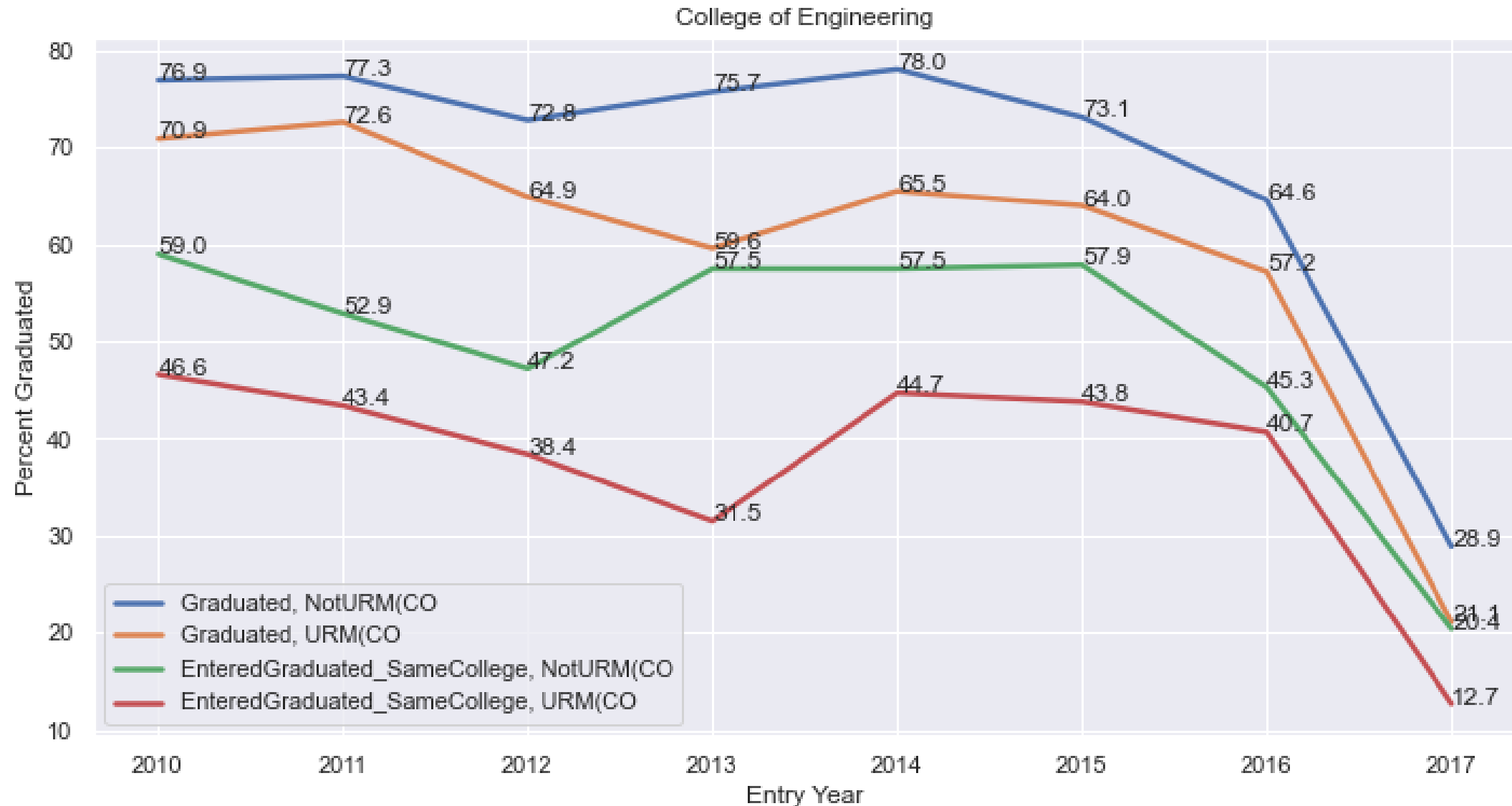
# Four Year Graduation URM Gap



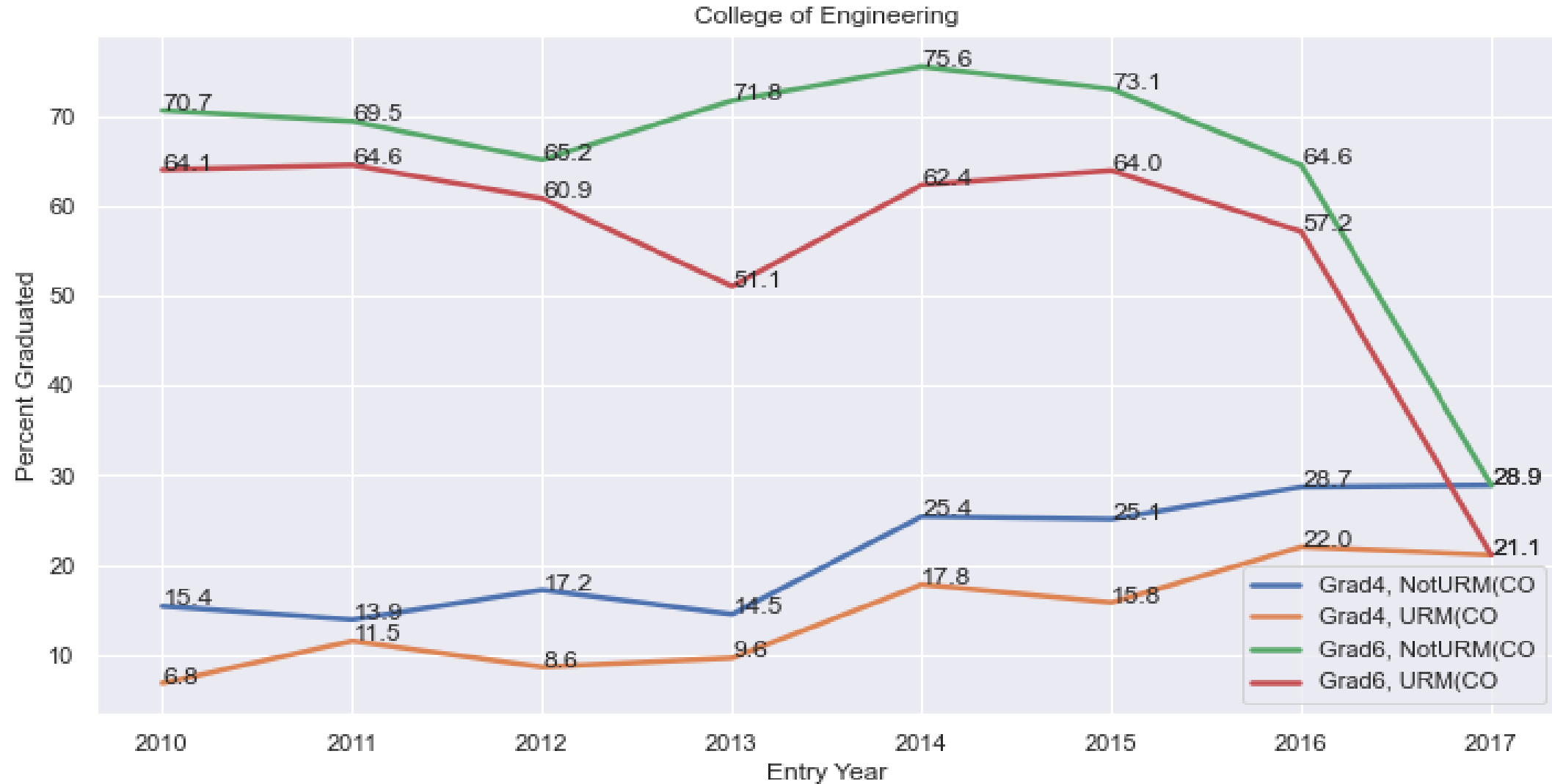
# Six Year Graduation URM Gap



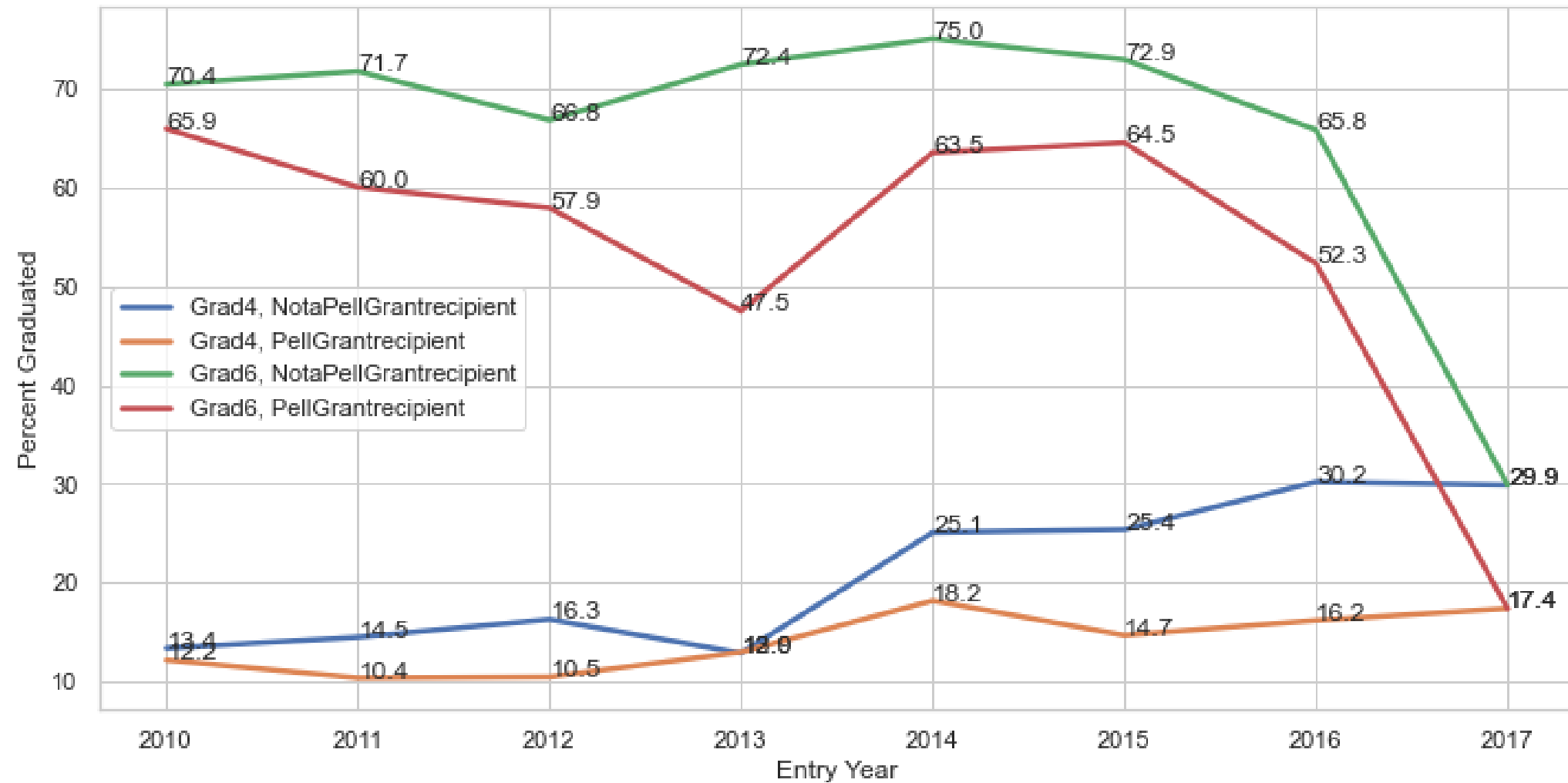
# Graduation Rates



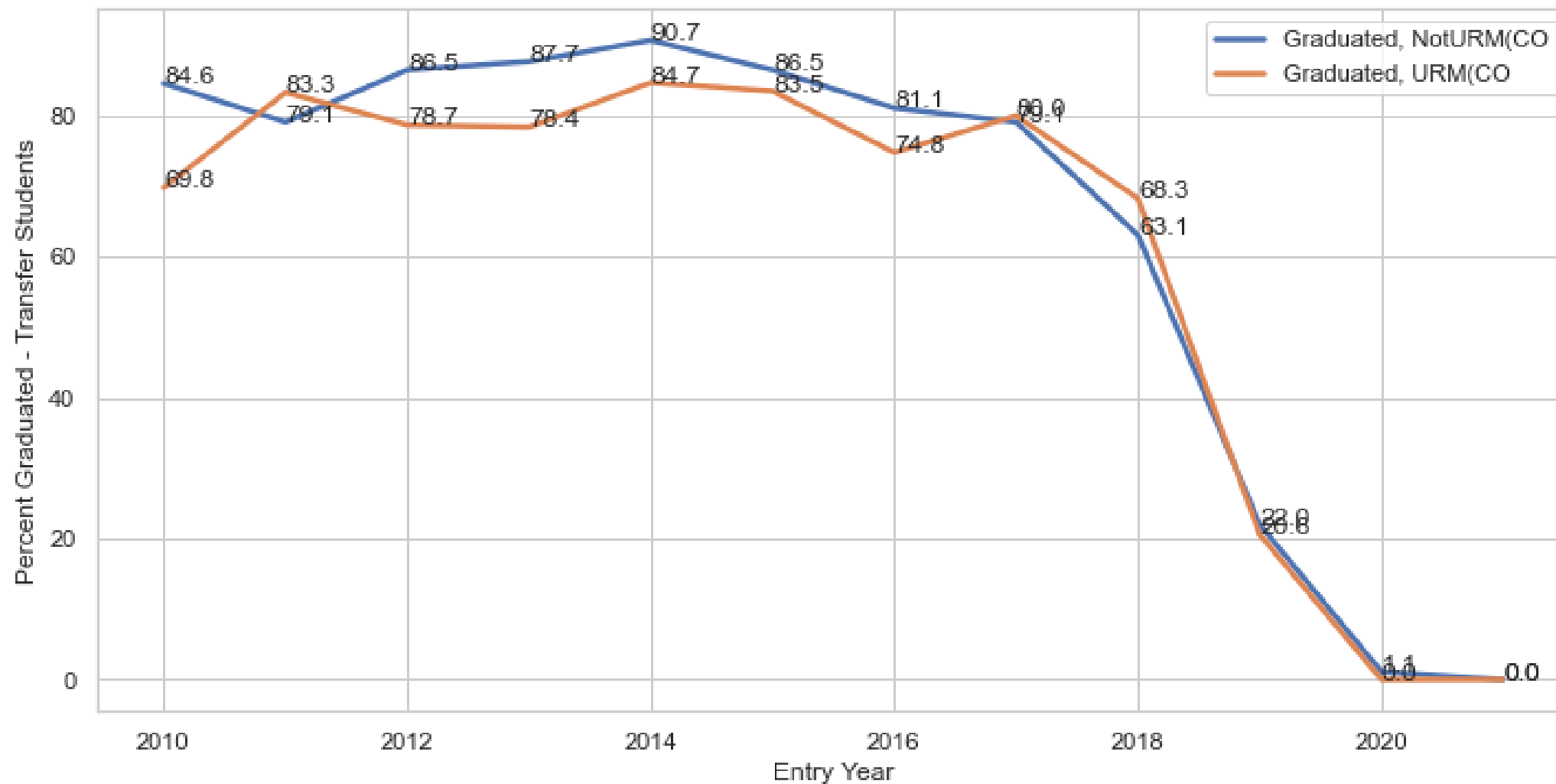
# Graduation Rates



# Graduation Rates

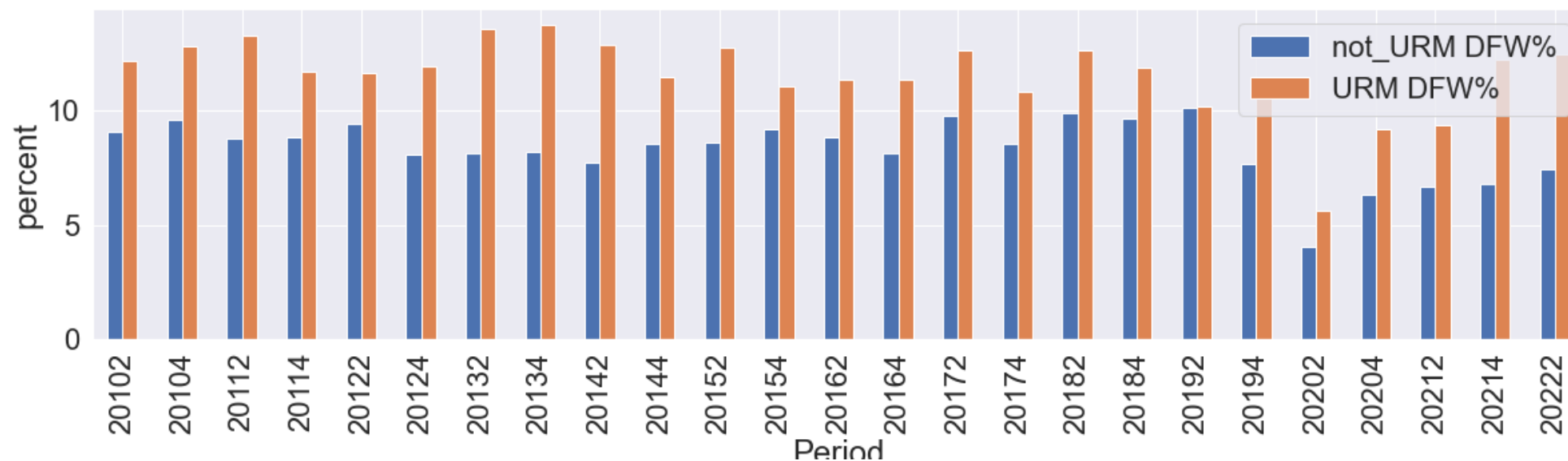
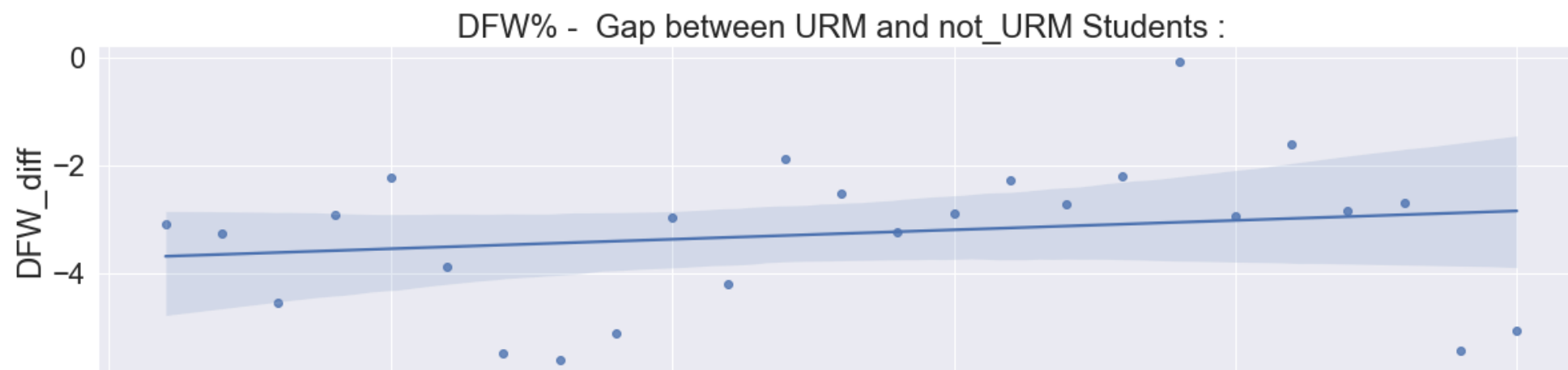


# Transfer Graduation Rates (URM)



GPA gap between URM and Not\_URM students







# Closing Achievement Gaps is a priority

- We will contact you if you are teaching one of the high DFW and high achievement gap courses to explore possible ways college can provide help to reduce DFW rates and close achievement gaps.

# Student, Success & Engagement

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### DEI in everything we do

SDSU Strategic Plan Priority #4

Led by or in partnership with Assistant Dean for Student Affairs

- In alignment with SDSU Strategic Plan
- Strive toward meeting CoE Goals

#### Student Success

- Updates
  - Student New Student Orientation: 282 New Transfers, 611 New 1st year
  - Advising
  - Center for Student Success in Engineering (CSSE) (brochure handout)
  - ENGR 101
  - Fall Targeted Events

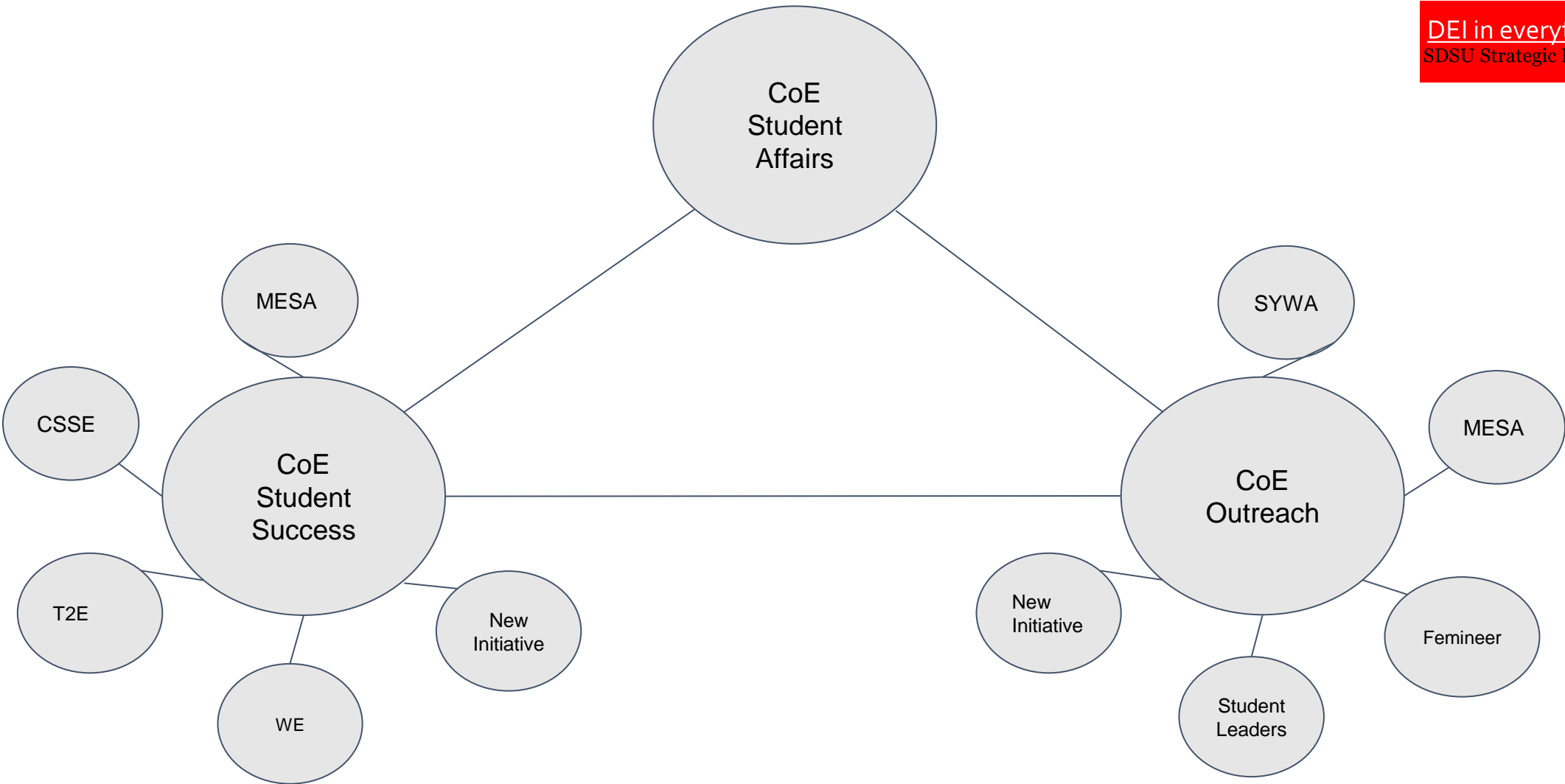
#### Outreach

- Restructure designed to
  - 'Unify' outreach efforts
    - Tracks and Connects
      - Special Programs
      - Outreach work of faculty
  - Re-Launch 'Student Leaders'
  - Support new initiatives

STUDENT SUCCESS

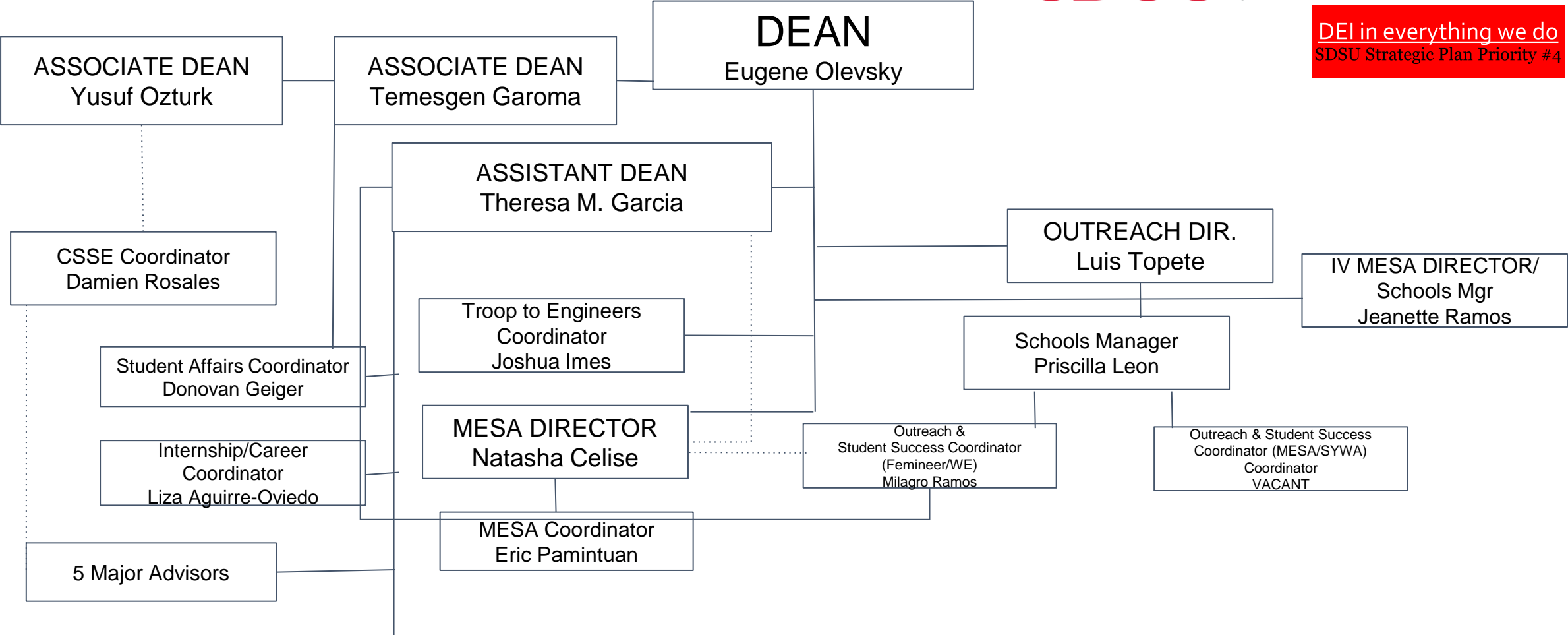
OUTREACH

DEI in everything we do  
SDSU Strategic Plan Priority #4



# Organization Chart

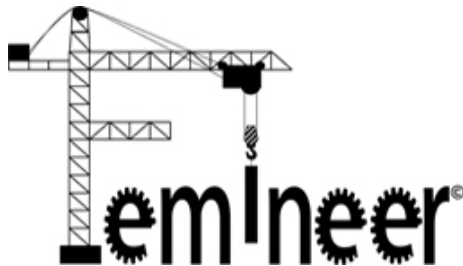
DEI in everything we do  
SDSU Strategic Plan Priority #4



STUDENT SUCCESS

OUTREACH

# Outreach Initiatives



## Fall

- **CoE Outreach Survey**
  - collect information about current activities
  - potential to partner or provide support
- **Email [eng.outreach@sdsu.edu](mailto:eng.outreach@sdsu.edu)**
- **Events**
  - ACCESS SDSU CoE
  - Various Outreach Events: Femineer, MESA, etc.

## Spring

- **MESA Day**
- **Femineer Summit**



- Advising
- Tutoring, facilitated by MESA
- Career and Internship support in collaboration with Career Services



SDSU Strategic Plan, Priority #5



STUDENTS AT  
OUR CORE

## Tutor Position Announcement - Fall 2022

**Hourly pay rate:** \$16 **Hours per week:** 8-20 hours/week

**Work schedule:** Weekdays (hours vary) with options in-person and online via Zoom

**Position start date:** Pending clearance from SDSU Human Resources

### Minimum qualifications:

- ☐ Must be a current SDSU student
- ☐ 3.0 GPA for graduate level students  
(Graduate level students must meet [TA/GA/ISA contract eligibility](#) of SDSU Graduate & Research Affairs)
- ☐ B grade or higher in the course(s) you will tutor
- ☐ B grade or higher in the course(s) prerequisites you will tutor
- ☐ Preference of taken the course(s) at SDSU
- ☐ Ability to demonstrate knowledge of the subject, work cooperatively with others, and prioritize multiple students

### Courses hiring for vary, but may include:

- ★ AE 220, 280, 302, 320
- ★ CIV E 225, 321
- ★ COMP E 271, 475, 572
- ★ EE 200, 210, 410
- ★ ME 190, 202, 304, 350, 360

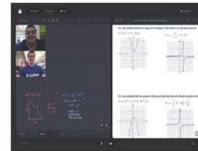
Complete an **application online** at

<https://mesa.sdsu.edu/activities/coe-tutoring-program>

[Handshake](#) Job Code # 6743984

Application deadline: Positions are open until filled.

Revised 8/1/2022



<https://mesa.sdsu.edu/activities/coe-tutoring-program>





SAN DIEGO STATE UNIVERSITY  
Center for Student  
Success in Engineering

# Student Success: SDSU Advising Model

SDSU Strategic Plan, Priority #5



STUDENTS AT  
OUR CORE

- **Decentralized**
  - Office of Evaluations (no more Advising)
- **Holistic**
- **Proactive**
- **Coordinated Care Network**



SAN DIEGO STATE UNIVERSITY  
Center for Student  
Success in Engineering

# The Coordinated Care Network

SDSU Strategic Plan, Priority #5



STUDENTS AT  
OUR CORE

- *Academic/General Advisors*
- *Deans*
- *Faculty - Instructors*
- *Office of Evaluations*
- *Financial Aid & Scholarships*
- *Registrar*
- *Directors*
- *Counselors*
- *Academic Coaches*
- *Peer Advisors/Mentors*
- *Others*

***All of Us!***

# ADVISING

## PEER ADVISOR

- Engineering students
- Located in CSSE
- Help understand & utilize advising tools
- Student Experience

## MAJOR ADVISOR

- Assigned to every engineering pre-major and major
- Course Planning: GE, Major Prep & Major
- Graduation Requirements
- Master Plan
- Guide from start to finish!

## FACULTY ADVISOR

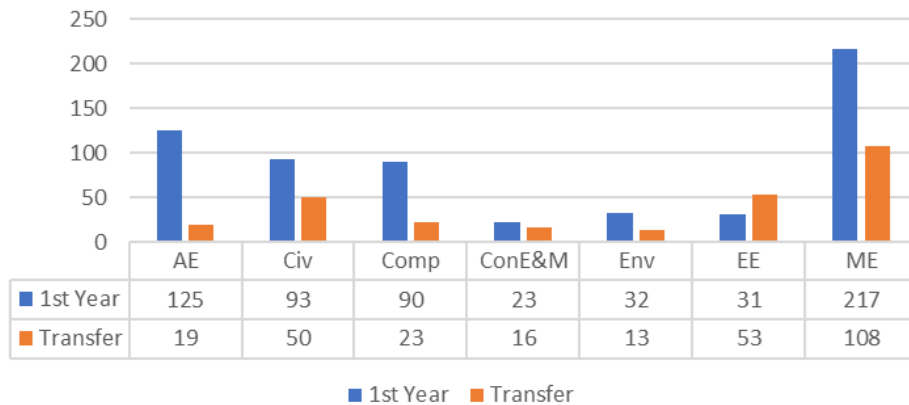
- Course Content
- Research Opportunities
- Graduate School

SDSU Strategic Plan, Priority #5



STUDENTS AT  
OUR CORE

## New Student Orientation Summer 2022



2573 total new students and guests

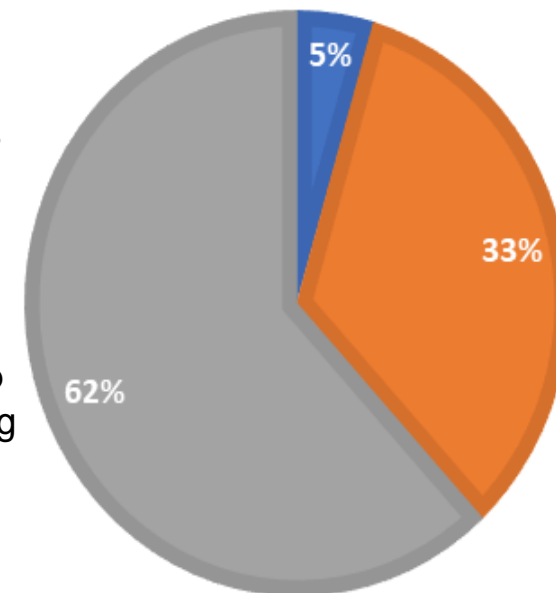
- 282 new transfers
- 611 new first years

## CSSE VISITS, 8/16/21-8/4/22

Email/Text/Ph In Person Virtual

8086 appointments  
made by 2770  
distinct students

Visits include  
advising, internship  
support and tutoring



# Events

**SDSU** | College of Engineering  
Center for Student Success in Engineering

## WE'RE HAVING AN OPEN HOUSE AND YOU'RE INVITED!

Learn about the CSSE services (including advising, tutoring, and internships) and meet the new College of Engineering Major Advisors.

**Date:** Tuesday, September 20, 2022, 9 AM to 2 PM

**Location:** Find us outside on the walkway between the EIS and Engineering Building

Beverages and snacks are included in the event, so please stop by and PARTICIPATE in our Open House meet and greet!

SDSU'S WOMEN IN ENGINEERING PRESENTS:  
**WOMEN IN ENGINEERING (WE) CHATS**

A monthly lunch seminar with the female faculty of SDSU's College of Engineering

SAN DIEGO STATE UNIVERSITY  
Center for Student Success in Engineering

**Conduction Chats**

Panel Speaker Series  
October - National Transfer Students  
November - National 1st Gen Students

NATIONAL TRANSFER STUDENT WEEK

**SDSU** | College of Engineering  
Center for Student Success in Engineering

## How to Develop a Great Elevator Pitch 4 Steps

**SDSU** | College of Engineering  
Center for Student Success in Engineering

## Careers in Engineering PANEL SERIES

**SAVE THE DATE**

AEROSPACE: TBD

MECHANICAL: TBD

ELECTRICAL/COMPUTER: TBD

CIVIL/CONSTRUCTION/ENVIRONMENTAL: TBD

More details will be posted in Canvas.

# College of Engineering Student Council

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# *Overview of SDSU College of Engineering Student Clubs and Organization successes and goals for 2022/2023*

**Presented by:**  
**College of Engineering Student Council (CESC)**



## Goals from Last Year

- **As a college, building a sense of community again**
  - One of the methods is through the creation of discord servers
- **Creating Merchandise and donating profits to ARH**
- **Help students to find the RSO that suits them best and get them involved**
  - Joining an RSO has helped students secure future careers
- **Getting Students involved with student government**



# Club Achievements



## Aztec Baja

Placed 8th overall but first in suspension and traction

Goals are to prep for upcoming competition in september



## Rocket Project

Relaunch of Lady Elizabeth

Continuation of preparations for Karmen San Diego - Launch to space



## AER

Was unable to place due to a failed technical inspection

Biggest change to our orgs next year is the merger of AER and AR into a single team

Goals are to complete the merger and secure more reliable sources of funding

# Club Achievements



## Mechatronics

At the time of making the slides the team is in Maryland currently participating in the competition



## Networking Orgs

Most of the Networking orgs had similar goals and achievements. Some examples of these types of Orgs are SHPE, SWE, NSBE, etc.



## ASCE/Concrete Canoe

Placed 1st for technical writing and placed 2nd in for Concrete Canoe



Getting scholarships for members - pictured on the top left is SHPE scholarship winners

Goals are to expand to include more members, and to plan more events including getting more speakers



# CESC Goals for 2022/2023

- Getting internships / Careers - working with Liza, channel on discord
- Getting more companies on campus
  - Last year a big one was Aptera
- Further Discord Integration - Want to shoot for 8 involvement
- GETTING STUDENTS INTO RESEARCH



# Department Discord Servers



- **Benefits of Discord**
  - Increase intra-department communication for all grade levels.
  - Get notifications from the University, Department, Clubs/Organizations & work opportunities/internships
  - Communication within classes
  - Develop personal connections with peers outside of class - (study sessions, personal project highlights, etc.)
- **>70% students are in the server and seeing the above benefits**
- **Has to be told about it for people to join**
- **Could be improved with more content such as research opportunities or internship opportunities**

# Our Events

- **Engineering club and org fair - August 30**
- **Pumpkin drop - October 27**
- **Grad Student Fair - tbd**
- **Engineering Week - semester 2**
- **Aztecs Rock Hunger!! went from last place to second place  
8000% increase need to beat HHS - semester 1**
- **And More**



Last Years Pumpkin Drop



**Or at [linktr.ee/cescsdsu](https://linktr.ee/cescsdsu)**

# Other Business

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# 2022-23 CoE Committee Elections

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# Constitutions & Bylaws

- Chair is the College Parliamentarian and is elected by the faculty at-large
- *Dr. Julio Valdes – Parliamentarian & Chair term ends 08/22*
- Vote

# Approval of 04/26/2022 CoE Faculty Minutes

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# Important Dates

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# Important Dates

## Fall 2022

**August 19 (Fri) – 6:30pm-8:30pm – CoE Gathering – Tom Ham’s Lighthouse**

**August 20 (Sat) – 10:00am-11:15am – New Student & Family Convocation – Viejas Arena**

**August 22 (Mon) – First Day of Classes**

**October 11 (Tue) –11:00am-12:30pm–CoE Faculty Meeting – Gold Auditorium, BioSc. Ctr.**

**October 13 (Thu) – 1:30pm-2:30pm–CoE Staff Meeting – Dean’s Conference Room E-203E**

**December 6 (Tue)–11:00am-12:30pm –CoE Faculty Meeting–Gold Auditorium, BioSc. Ctr.**

**December 8 (Thu)–1:30pm-2:30pm – CoE Staff Meeting – Dean’s Conference Room E-203E**

# Thank you!

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