

College of Engineering Faculty Meeting

April 25, 2023



AGENDA

Call to Order

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

Engineering Development Update

State of the College

- ☐ **Strategic Plan Update**
- ☐ **Faculty Search Update**
- ☐ **Research & Graduate Program Update**
- ☐ **Undergraduate Program Update**
- ☐ **Student Success & Engagement**
- ☐ **DEI Council Update**
- ☐ **Community & Communication**
- ☐ **Important Dates to Remember**

Other Business

- ☐ **Approval of 02/14/23 CoE Faculty Meeting Minutes**

CoE Constitution & Bylaws, Appendix A

Adjournment

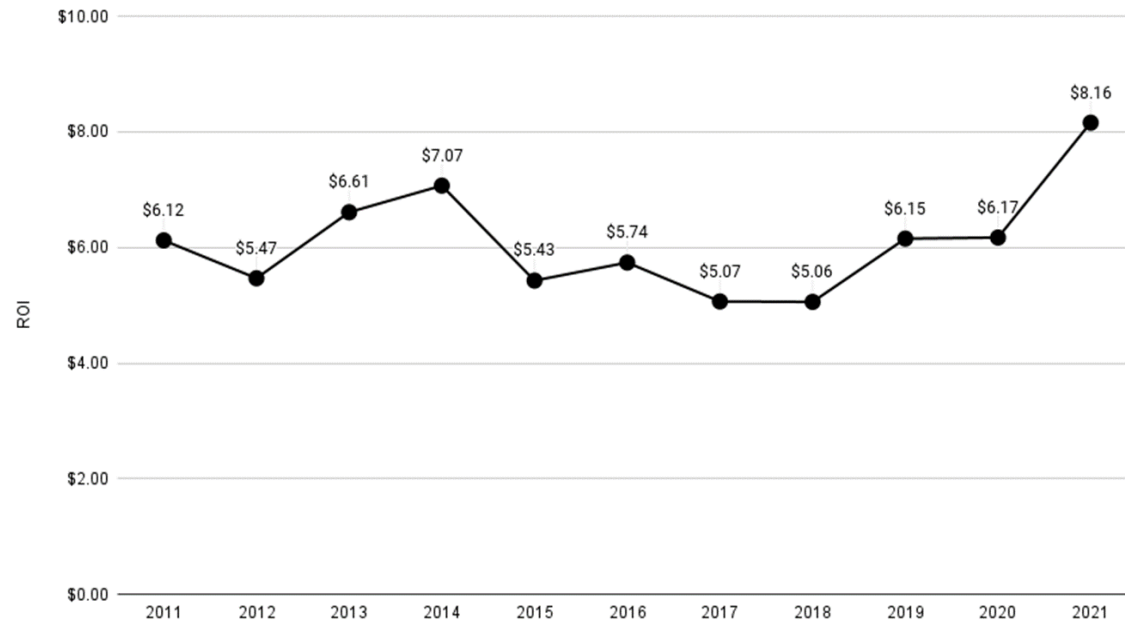
Development Update



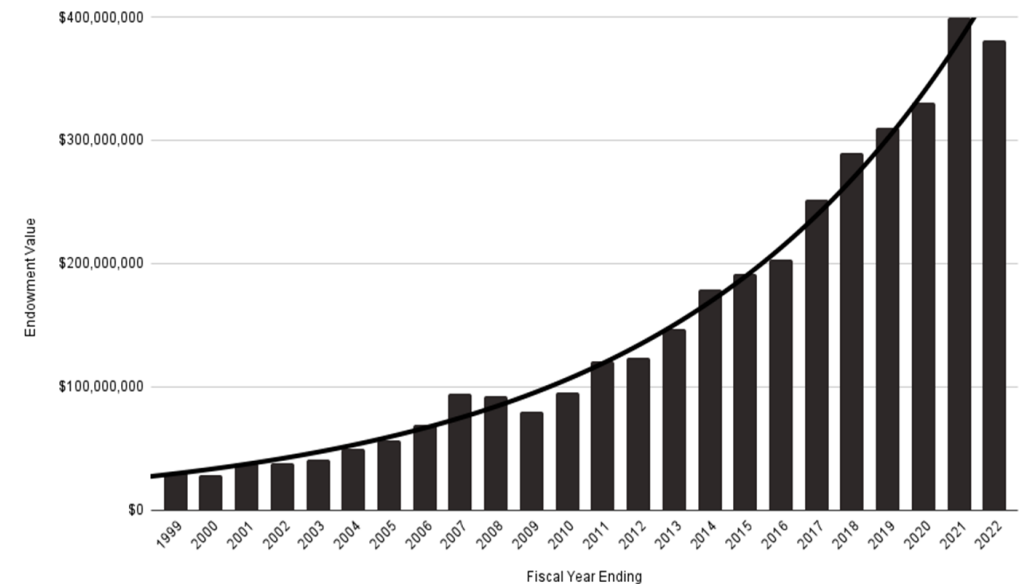
Development Update

Endowment – University Wide

Return on Investment, 2011-2022



TCF Endowment Balance, 1999-2022



Development Update

State of the Endowment – University wide

Endowment as of July 31, 2022

\$406,000,000

Endowment Purposes

\$224,000,000 – Campus Programs

\$136,000,000 – Scholarships

\$33,000,000 – Endowed Chairs & Professorships

\$13,000,000 – Other

Why Named Endowment

- Perpetuity
- Sustainable during market volatility
- Legacy for the donor
- Recognition for recipient
- Not comingled – single accounts
- Single donor – variance
- Endowment is a factor for R1 Designation

A person never truly dies until their name is never spoken again

State of the College



CoE Strategic Plan



**College of Engineering
San Diego State University
Strategic Plan, 2023-2028**

Strategy I: Actively contributing to University's efforts to become an R1 Doctoral University

Goal I.1: Pursuing independent doctoral programs (IDPs): updating developed and developing new proposals, contributing to university efforts on establishing IDPs (2028: full proposals are developed in each department).

Goal I.2: Increasing extramural funding (2028: \$200,000/year per T/TT faculty member).

Goal I.3: Increasing graduate student enrollment.

Strategy II: Developing and implementing innovative practices

Goal II.1: Developing Global campus programs (2028: at least 5 programs will be offered by College via GC).

Goal II.2: Actively pursuing philanthropic donations (2028: College endowments total \$30M with at least 70 endowed funds).

Goal II.3: Developing Public-Private Partnerships (P3s) and Industry-Supported Centers (ISCs).

Strategy III: Contributing to the expansion of University's global impact

Goal III.1: Actively pursuing College's involvement in the Mission Valley campus.

Goal III.2: Actively pursuing College's involvement in the Imperial Valley campus.

Goal III.3: Developing partnerships with universities and institutions overseas.

Goal III.4: Increasing enrollment of out-of-state and international students in graduate and undergraduate programs.

Strategy IV: Advancing diversity, equity, and inclusion in College of Engineering activities

Goal IV.1: Improving gender and ethnic diversity in faculty to reflect diversity in student population.

Goal IV.2: Improving pathways for students from Underrepresented Minority (URM) backgrounds to enter graduate programs.

Goal IV.3: Strengthening and sustaining a climate to promote and nurture the growth and inclusion of students, faculty, and staff of the College of Engineering.

Strategy V: Advancing student success

Goal V.1: Advancing student success by enhancing the quality of teaching and learning as well as closing the equity gaps (2028: 4-year graduation rate of first year students exceeds 40%, 2-year graduation rate of transfer students exceeds 30%, equity gaps are lower than 5%).

Goal V.2: Advancing the participation rate for undergraduate students in internships, research opportunities, and fellowships to enhance employability and access to graduate studies.

Goal V.3: Ensuring sustainability of College outreach programs (2028: College outreach programs, including support of URM, women in engineering, and veteran groups, are financially and organizationally sustainable).

Strategy VI: Pursuing Strategic Resources

Goal VI.1: Hire additional faculty members that help us reach the R1 status (2028: Total 90).

Goal VI.2: Hire professors of practice/full-time teaching faculty, depending on availability of job classifications, to help carry out our teaching missions as the university grows towards the R1 status.

Goal VI.3: Hire additional staff members in order to support our teaching and research missions.

Goal VI.4: Increase and enhance college Infrastructure to carry out our teaching and research missions.

Goal VI.5: Pursue additional resources to enhance our graduate and undergraduate student enrollment.

Faculty Search Update



2023/24 Faculty Search Update

- ❖ **VPAA 2023-24-38 (ME Assistant Professor)**
- ❖ **VPAA 2023-24-06 (ME Assistant Professor)**
- ❖ **VPAA 2023-24-39 (ECE Assistant Professor)**
- ❖ **VPAA 2023-24-20 (AE Assistant Professor)**
- ❖ **VPAA 2023-24-05 (ECE fred harris DSP Endowed Chair)**

Research & Graduate Program Update



Research – \$ Awards

Department	Total #T/TT (2022/23 AY)	\$ Awards		
		FY 2022	FY 2023 (as of 04/17/23)	FY 2023 (% of FY 2022)
AE	11	\$1,799,602	\$1,095,009	60.8
CCEE	21	\$2,570,577	\$1,175,423	45.7
ECE	20	\$2,352,142	\$3,278,223	139.4
ME	22	\$3,554,772	\$2,748,473	77.3
Total	74	\$10,543,161	\$8,297,128	78.7

Research – Available Balance

Department	March 2022		March 2023	
	Budget (\$)	Available Balance (\$)	Budget (\$)	Available Balance (\$)
AE	4,474,485	2,109,393	4,986,446	2,245,705
CCEE	9,986,627	3,657,626	11,153,764	3,115,527
ECE	9,099,652	3,603,676	11,818,968	5,139,411
ME	11,906,123	3,900,299	11,355,696	3,811,926
Dean's Office	1,126,398	17,348	902,321	359,725
Total	36,593,285	13,288,342	40,217,195	14,672,294

Proposals Success Rates (as of 4/17/23)

Submitted As Of Fiscal Year	Submitted Count	Pending Count	Evaluated Count	Awarded Count	Declined Count	Withdrawn Count	Success Rate
2015	90.83	0	90.83	49.5	38.33	3	56.36
2016	140.19	0	140.19	75.52	64.67	0	53.87
2017	139.62	0	139.62	71.04	65.08	3.5	52.19
2018	145.97	0	145.97	69.47	70.5	6	49.63
2019	135.67	0	135.67	72.59	63.08	0	53.50
2020	162.02	0	162.02	70.82	90.2	1	43.98
2021	174.75	1	172.75	68.47	102.28	3	40.34
2022	141.83	13.33	125.5	61.33	66.17	1	49.26
2023	119.28	65.78	53.5	35.5	18	0	66.36
Average	138.91	8.90	129.56	63.80	64.26	1.94	51.72

- **Over 100+ applications received for fall 2023 admission cycle**
- **The JDP Steering Committee started meeting weekly in early January**
- **Only a few applications were ready for review through February**
- **Reached out to applicants and advisors for unofficial transcripts**
 - **35 applicants were identified as potential admits**
 - **25 passed to department review and 10 missing items**

- The 25 applicants were forwarded to UCSD
- 13 of them were accepted; 12 still under consideration
- Admission letters and financial offers have been sent to five of them
- For the remaining eight, advisors are still figuring out financial support

- **PGRF**
 - Eight nominations through priority cycle – two awarded
 - One monitions through regular cycle – two awarded
- **UGF**
 - 16 nominations submitted
 - Results will be announced in May

- **Revised guidelines**
 - Per CGS, ALL students (incoming and returning) are eligible for NRTW awards
 - A lottery system will be used to allocate NRTWs

MS Programs

Fall 2023 Application Cycle (as of 4/17/23)

- All MS program in the College are affected
- New grad student enrollment will significantly decrease
- Most affected programs
 - MSEE – 122 application (only 5 are ready for review)
 - MSCOMPE – 63 applications (only 1 is ready for review)
 - MSCE – 90 applications (17 ready for review)
 - MSAE, MSME, MSBIOE, and MENG

SDSU College of Engineering
Guidelines for Allocation of Assigned Time for Graduate Advisers

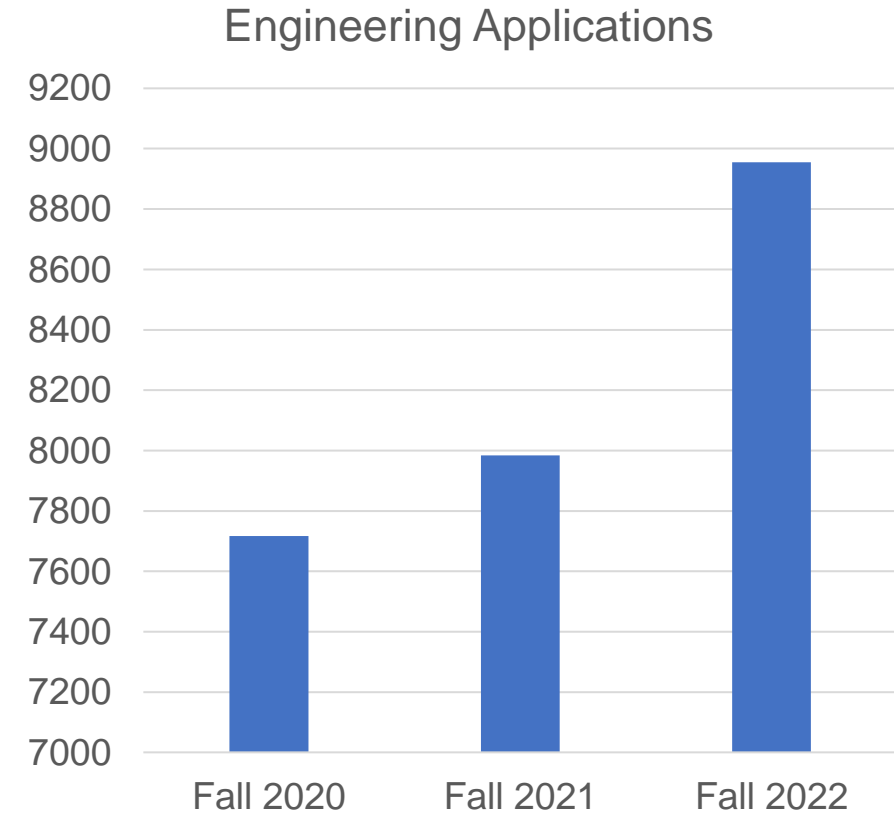
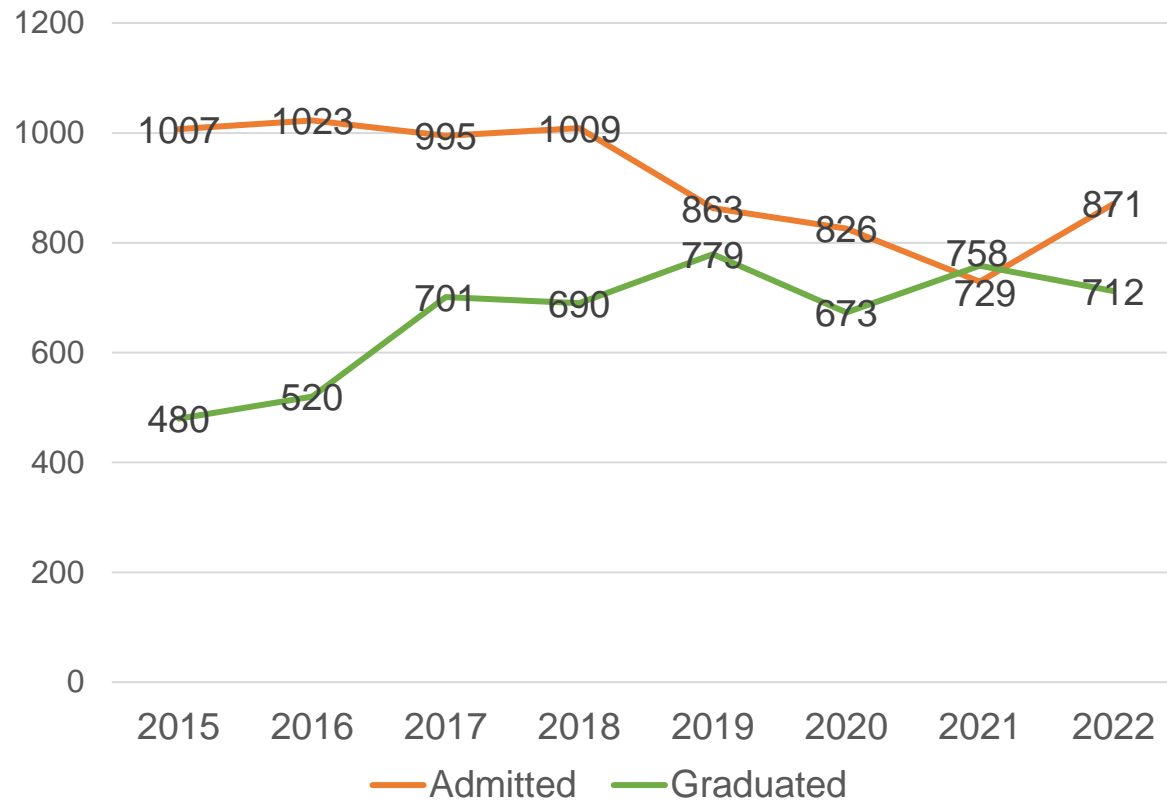
03/15/2023

1. Graduate advisers play an important role in the academic life of graduate students. Graduate advisers act as the first source of information for prospective students and help admitted students on matters affecting graduate students and their academic programs.
2. The responsibilities of graduate advisers include, but are not limited to:
 - Respond to inquiries from prospective and current students.
 - Review applications to graduate programs and make admission recommendations to the SDSU College of Graduate Studies.
 - Prepare admissions letters for students admitted to the programs.
 - Review and approve the program of study for each graduate student.
 - Review and act on each petition submitted by a graduate student.
 - Provide general course advising to graduate students.
 - Oversee the implementation of departmental policy in all matters pertaining to graduate programs.
 - Interact with the SDSU College of Graduate Studies as required to assure the smooth operation of the program.
 - Advise graduate students and coordinate with the department faculty the advising of graduate students in matters pertaining to their respective fields of specialty.
 - Handle all other matters pertaining to the administration of the graduate programs.
3. The College of Engineering will provide the following compensations to department graduate advisers.
 - a. Assigned Time: A graduate adviser with 70 or more students enrolled in a program will receive six (6) units per year of assigned time for his/her academic year efforts. If the number of students enrolled in the program is less than 70 but equal to or over 35, the graduate adviser will receive three (3) units of assigned time per year.
 - b. Salary: A graduate adviser with 70 or more students enrolled in a program will receive additional compensation at 8% effort for winter and summer break efforts. If the number of students enrolled in the program is less than 70 but equal to or over 30, the graduate adviser will be compensated at 5% effort for winter and summer breaks.
 - c. It is recommended that each department have one graduate adviser.

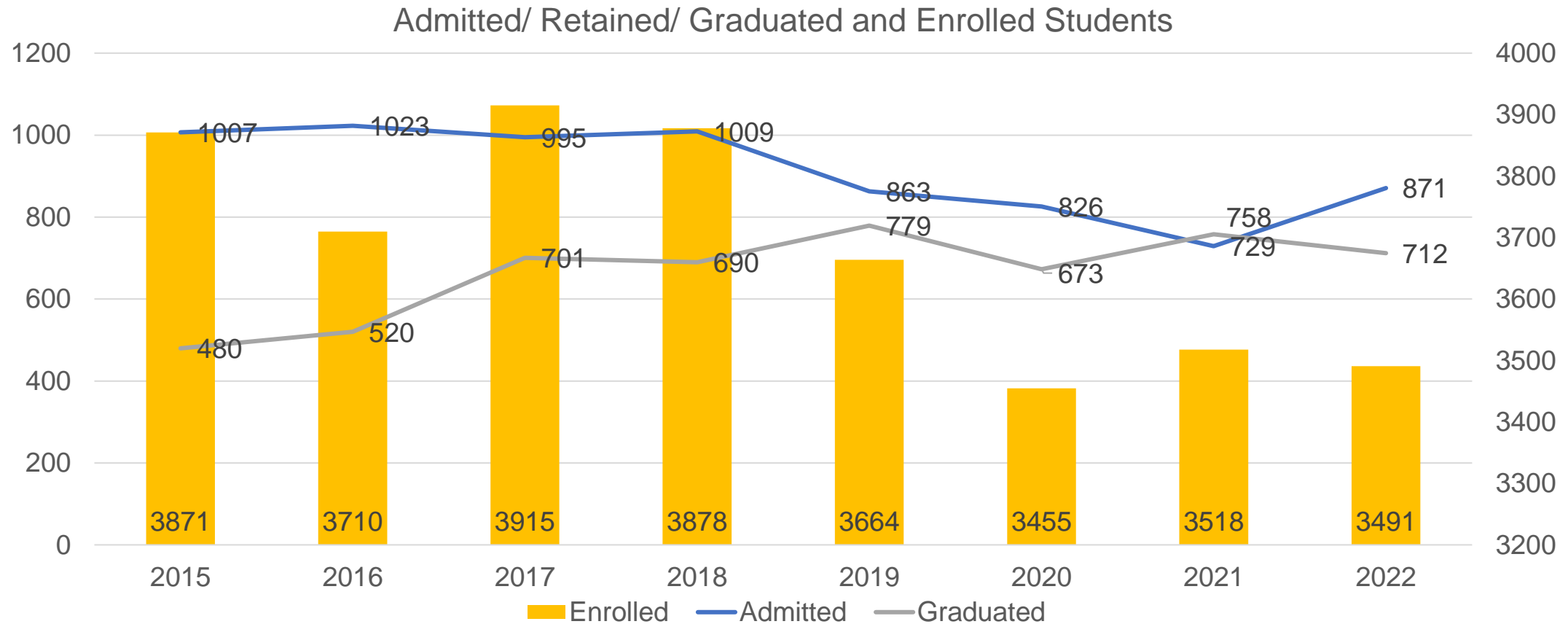
Undergraduate Program Update



Engineering Applications & Graduations

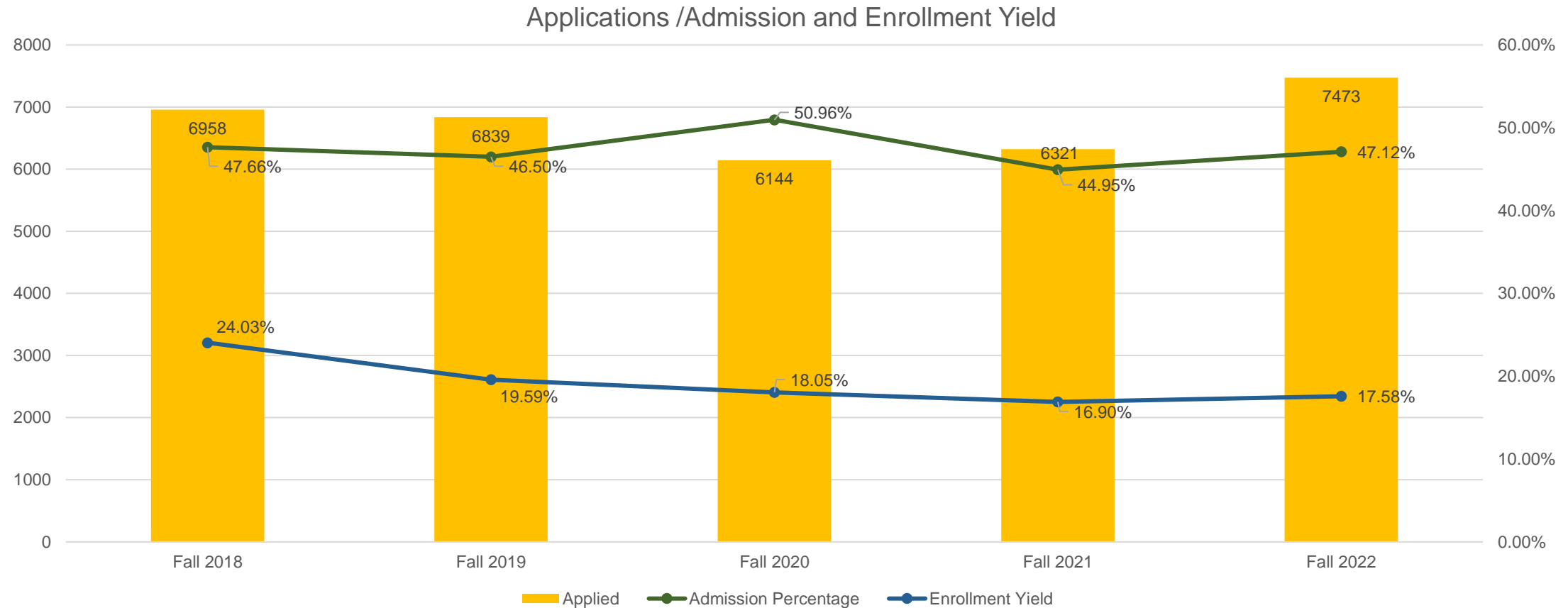


Admitted/Retained/Graduated and Enrolled



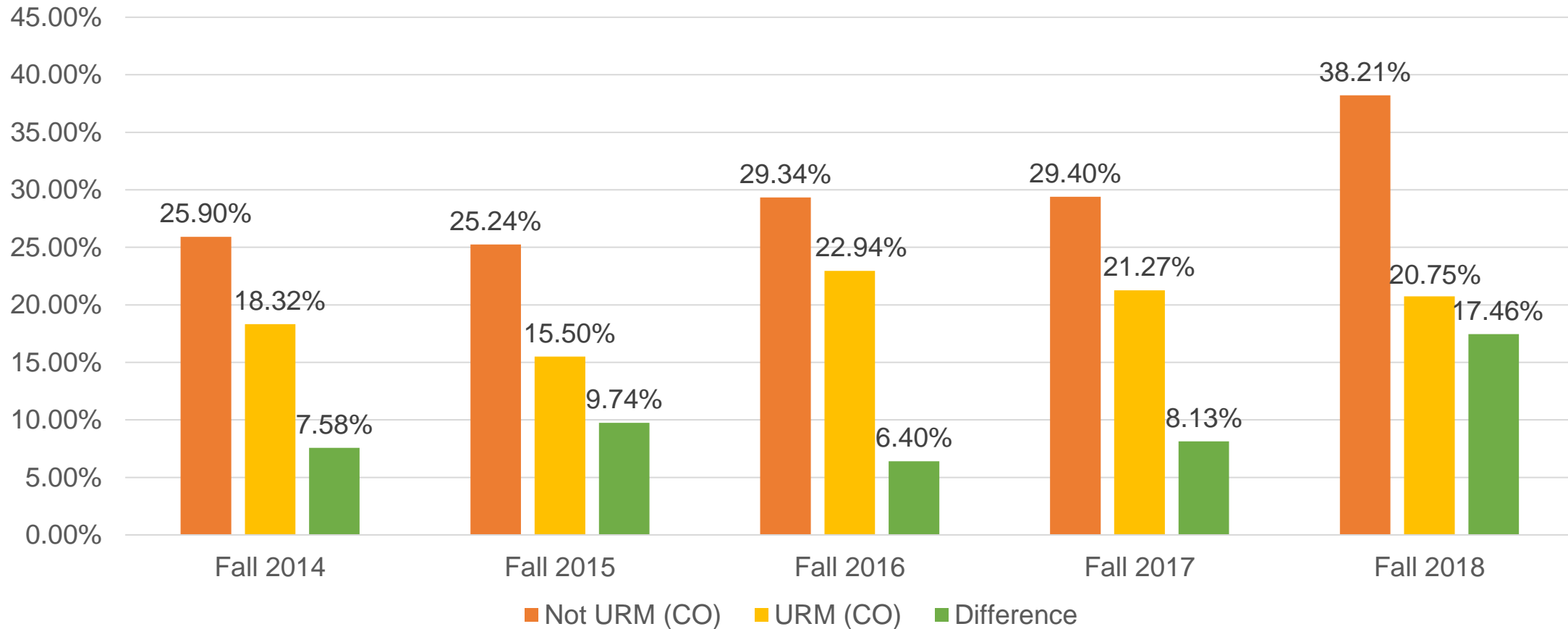
We Retain and Graduate about 55% of the First time Freshman from Engineering and 88% of the Transfer Students. Engineering student's graduation rate from SDSU is close to 75% while graduation from Engineering is 55%.

Applications/Admission/Yield



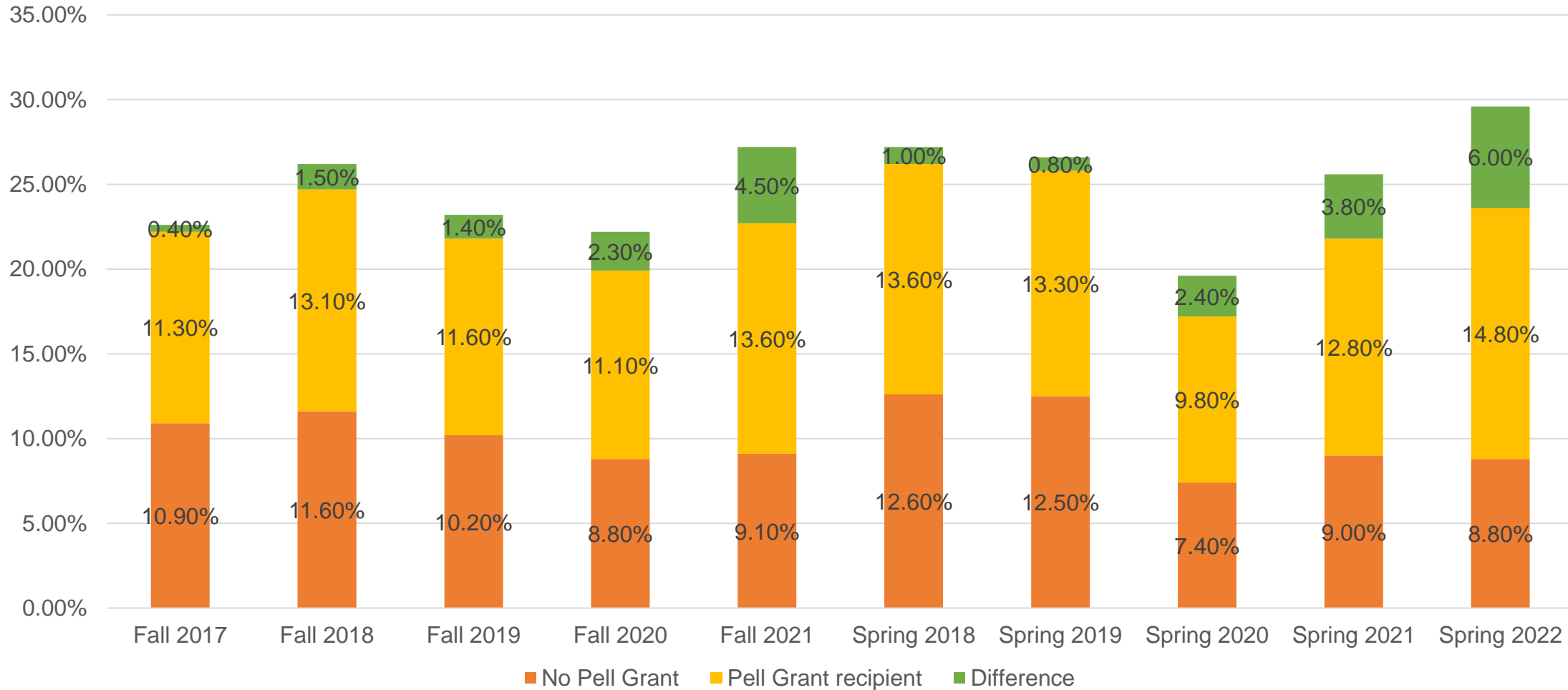
Graduation Gaps (URM – 4 years or less)

4 Year or Less Graduation Percentage



Pell Recipient/DFW% Gap/College

DFW Percentage /College



Summer Session – Incentive Modeling

SUMMER 2021 ENROLLMENT INCENTIVE FUNDING							Historical Data						
	SUMMER 2021												
	BASE FUNDED FTES (Established Sum. 2018)	ENROLLMENT TARGET FTES	INCENTIVE TARGET FTES	CENSUS	Increase or Decrease from Incentive Target FTES	Enrollment Incentive Funding Adjustment based on Census FTES [3] (\$1.5k)	Census Summer 21	Census Summer 20	Census Summer 19	Census Summer 18	4 Year Average	3 Year Average	2 Year Average
Arts & Letters	882	1,080	935	1161	226	\$339,000	1161	1116	882	807	991	1,053	1,138
Business Administration	389	471	438	496	58	\$87,000	496	484	416	414	452	465	490
Education	359	621	515	704	189	\$283,500	704	641	482	423	563	609	673
Engineering	197	296	261	218	-43		218	305	227	250	250	250	262
Health & Human Services	270	424	364	423	59	\$88,500	423	438	326	327	378	396	430
Professional Studies & Fine Arts	460	483	463	469	6	\$9,000	469	498	411	481	465	459	484
Sciences	422	800	601	799	198	\$297,000	799	821	504	479	651	708	810
IVC	62	180	129	159	30	\$45,000	159	185	123	80	137	156	172
Undergraduate Studies	1	-	1	1	0	\$0	1	0.4	1.0	1.0	1	1	1
Total	3,042	4,355	3,707	4,430	723	\$1,149,000	4,430	4,488	3,372	3,262	3,888	4,097	4,459

In State 4,025 4,024 2,991 2,810
Out of State 404.7 463.4 380.7 452.3

[3] \$1,500 per FTES above target

Summer Program - Incentive

- 1 Million is available to distribute as incentive as previous years
- The university recommends

$$\text{Incentive Target} = \text{Max} (2021 \text{ Sum FTES}, 2022 \text{ Sum FTES}) * 0.95$$

For engineering University Suggests

$$\text{Incentive Target} = \text{Max} (218, 180) * 0.95 = 207$$

We are recommending (for Engineering)

Our target is set at 180. We are currently at 148

Need New Courses:

Summer Budget Explanation

Base FTES	197
Budget Received for Base FTES	343843
Per FTE cost	1745.396
College FTES Target	220
Incentive Amount per FTES	1500

Cost of the section = FTMS * 12 /30 * WTU

Dept	Crs No	Session	Section	Title	Units	Start	End	Day	Bldg	Room
M E	XXX	S1	1	Engineering	3	1000	1140	MTWTH	E	201

Antic Enrl	Enrl Limit	Proj FTES	Instructor	WTU	FTMS	Cost of Section	Fac-Indirect \$150/unit	Min Enrollment
12	50	2.4	Ozturk	3	5530.00	6,636.00		19

Antic Enrl	Enrl Limit	Proj FTES	Instructor	WTU	FTMS	Cost of Section	Fac-Indirect \$150/unit	Min Enrollment
12	50	2.4	Someone	4	12790.00	15,348.00	450	45

Summer course decisions

- **Department chair decides on the courses to be offered based on the program needs.**
 - Core courses at high demand
 - Courses that had large waitlists
 - Courses that will impact graduation timeline
- **Associate Dean Provides input based on likelihood of the course demand in previous semesters - The final decision to list resides with the department chair.**
- **If courses does not have adequate demand and no other financial source can be found to subsidize, courses with less demand may be canceled.**

Current Summer Enrollment – 04/18/2023

Course	Number of Students	FTES	Contribution
A E 200	2		0.400
A E 280	39		7.800
A E 340	18		3.600
CIV E 218	14		1.400
CIV E 225	24		4.800
CIV E 301	34		6.800
CIV E 302	22		1.465
CIV E 321	31		6.200
CIV E 421	17		3.400
CIV E 444	14		1.400
CIV E 462	40		8.000
CIV E 463	17		1.132
CIV E 465	45		9.000
COMPE 271	19		3.800
COMPE 375	56		5.600
COMPE 470	9		1.800
COMPE 561	11		2.200
CON E 330	18		3.600

Course	Number of Students	FTES	Contribution
CON E 350	7		1.400
CON E 480	21		4.200
E E 300	30		6.050
E E 330	15		3.000
E E 380L	1		0.067
E E 410	44		8.800
E E 430	10		2.000
E E 458	28		5.600
E E 795	1		0.083
ENV E 355	31		6.250
ENV E 363	20		2.000
M E 190	36		2.399
M E 220	24		4.800
M E 304	7		1.400
M E 314	29		5.800
M E 350	34		6.800
M E 360	25		5.000
M E 452	50		10.000
Grand Total	843		148.047

Student, Success & Engagement



Festival for Sci & Eng (4/3)



Thank you to our COEng Staff for your support.

DEI in everything we do
SDSU Strategic Plan Priority #4



Femineer
Summit
2023
4/25/23

FEMINEER
SUMMIT 2023

**SENIOR
DESIGN DAY**

MAY 3 AT MONTEZUMA HALL

HS SNEAK PEEK

**EXPLORE
SDSU
OPEN HOUSE**

4/15/23



SDSU

College of Engineering
Women in Engineering



GENERAL ATOMICS AERONAUTICAL

Info Session

Date:
March 14
2 pm - 3 pm

Location:
Zip Launchpad

Calling:
Computer Engineering
and Computer Science
majors!

PIZZA AND
RAFFLE!!

ENTER TO WIN A \$100
AMAZON GIFT CARD!

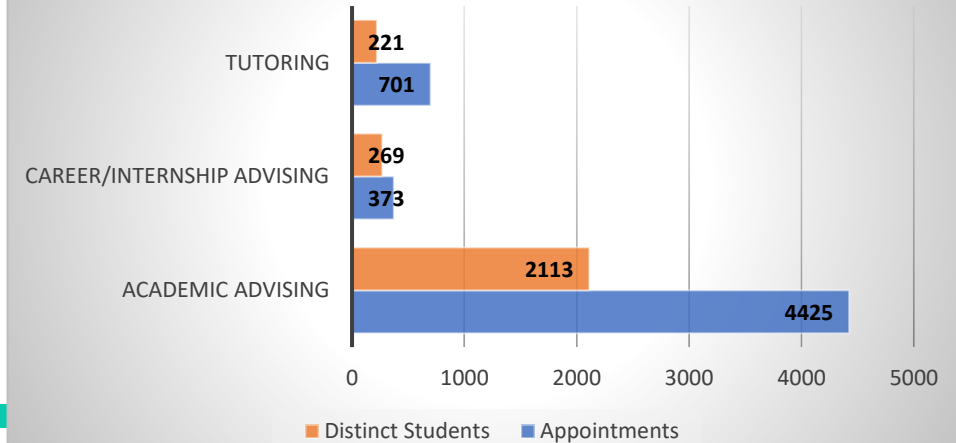
SIGN UP
NOW!

SDSU
College of Engineering
Women in
Engineering

College of Engineering
Center for
Student Success
in Engineering



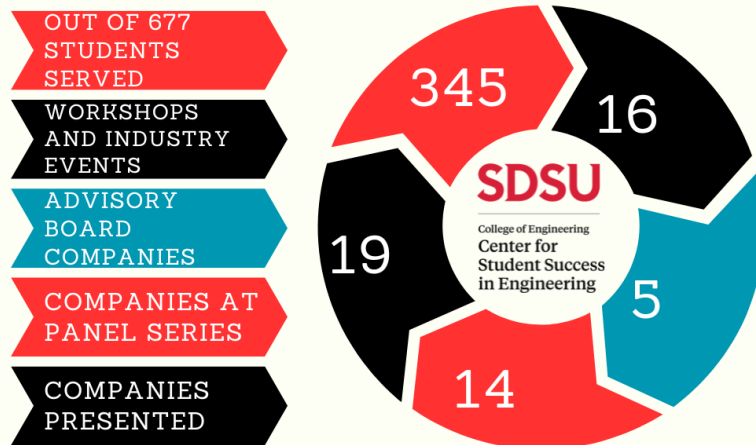
CSSE Visits, 8/22/22-4/18/23



CSSE Services

- Academic Support via Peer Tutoring
- Career & Internship Advising
- Advising
 - Major Advising
 - Peer Navigating (help with student experience and advising tools)

Career & Internship Impact



CoE Industry Partnership Model

- Align with CoE Strategic Plan (in-progress)
- Scale
- Catalysts

CSSE.SDSU.EDU

College of Engineering
Center for Student Success in Engineering

Engineering PANEL SERIES

SAVE THE DATE MEET ENGINEERS

CIVIL, CONSTRUCTION, AND ENVIRONMENTAL
FEBRUARY 1 / 2:00-3:00PM

AEROSPACE, EE, AND CE
FEBRUARY 15 / 2:00-3:00PM

MECHANICAL
FEBRUARY 22 / 2:00-3:00PM

LOCATION - CAREER SERVICES WORKSHOP ROOM

Note, these companies are a segment of those who will be attending.

College of Engineering
Center for Student Success in Engineering

College to Career Connections

At the College of Engineering's Center for Student Success we value partnerships with industry. Companies have multiple capacities to connect with our students, impacting their career preparedness and growth.

INTERNSHIPS
Companies can promote their opportunities engaging multiple major disciplines.

PANELIST or WORKSHOP
Engineers participate on one of our engineer panels, or host a resume or interview workshop.

COMPANY INFORMATION SESSIONS
Deliver a presentation about your company or department.

College of Engineering

Aerospace Engineering
Computer Engineering
Electrical Engineering
Civil and Construction Engineering
Environmental Engineering
Mechanical Engineering
Mechanical Engineering with BioE emphasis

We are a proud institution supporter of the National Association of Colleges and Employers' Career Preparedness Competencies.

For further details, please contact our College of Engineering Career & Internship Coordinator.
Liza Aguirre-Oviedo
Email: Laguirreoviedo@sdсу.edu

DEI Council Update



DEI Committee Update: Spring 2023

- **Managing the plan to invest the \$20K provided to CoE from the University Inclusion Council**
 - \$16K will be distributed to departments (\$4K each) to support undergraduate research
 - *AE Dept. has already posted a call for proposals, due April 20th*
 - *ME Dept. call forthcoming*
 - *Other departments have activities planned for Fall semester*
 - *Students AND faculty participating in these programs shall demonstrate how the research/mentoring activities will contribute to DEI efforts (e.g., through broader impact activities or based on criteria similar to the BIE hiring criteria)*
 - \$1.5K for seminars and programs with K-12 schools serving URM populations
 - \$1K (with matching funds from the Dean) for the Fall Graduate Program Information Session
 - \$1.5K (with matching funds from the Dean) for staff appreciation efforts
- **Analyzing 2019 and 2022 SDSU climate survey results to identify progress and areas needing attention**
- **Collecting data to track the progress on CoE DEI Plan activities**

Community & Communication



Spring 2023 Communications Recap

Article Highlights

- **Biomechanics of SDSU Basketball**
 - #9 on Google Search Results on Championship Day “SDSU Basketball”
 - 4:38 min (site avg day of: 2:46)
- **Emeriti Faculty Donation for Space Club**
- **AzTechs Win 1st Place in National Hackathon**
- **Alum Pens Engineering Children’s Book**
- **SHPE Founding Members 40 Year Anniversary**
- **AE Faculty in Top 2% Authors Worldwide**



External Media Hits

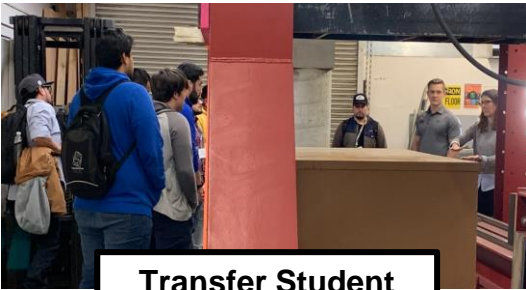
- Podcast Women in Construction
- KPBS - Joe Katz, Sonic Booms
- NBC7 Hassan Davani, Border Water Contamination
 - Ukrainian Researcher in Powder Technology Lab



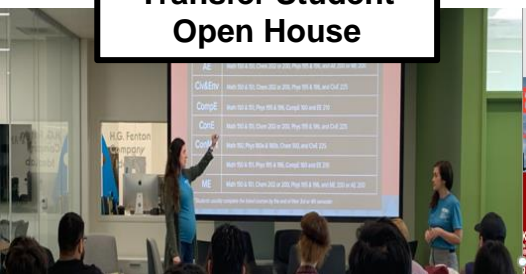
Reach (+300% increase)

- 53,000+ viewers (newsletter, web, social, stories)





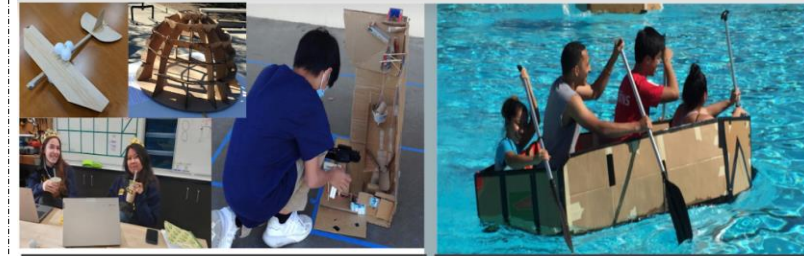
**Transfer Student
Open House**



Republic Services Training



**STEM Outside the Box
w/Qualcomm**



Regional MESA Day
at UC Riverside on April 15, 2023

Boat Challenge (SD/ IV)
April 29, 2023/ May 25th 2023



NEW Robotics Challenge (IV)
April 29, 2023

*Other programming includes: Graduating Senior Spotlights,
College-Going/Community College Workshops, and Summer Internship Prep.*

MESA
Math • Engineering • Science
Achievement

SCHOLARSHIPS

Early Action Application
April 10th-April 28th
apply via aztec scholarship system

- MESA PARTICIPATION IS A FACTOR IN SCHOLARSHIP REVIEW. AWARD RECIPIENTS ARE REQUIRED TO ATTEND MESA SCHOLARSHIP RECEPTION PLANNED FOR FALL 2023.
- WHEN FILLING OUT THE APPLICATION, MAKE SURE TO CHOOSE MESA WHEN ASKED ABOUT INVOLVEMENT IN ANY CLUBS OR ACTIVITIES.

DONORS

NORTHROP GRUMMAN

MESA Alumni Fund

RICK

MESA California

lytx

KYOCERA

Paul Stuverud
Endowed Scholarship

Sandra & Alfred Aldrete
Endowed Scholarship

MESA
Math • Engineering • Science
Achievement

GRADUATION RECEPTION

MESA
Math • Engineering • Science
Achievement

Are you a transfer student?

Transfer

CALCULUS

Review

- Get a refresher on advanced concepts that will help you in upper division courses
- Student Stipend

SDSU
College of Engineering

July 10 - August 11
9am - 12 pm

SUMMER UNDERGRADUATE RESEARCH ACADEMY

Date:
June 5 - July, 28, 2023

Stipend:
\$3,600

Activities included:

- 8 week immersive experience in various SDSU Research Labs
- Kick Off/Prep Meetings
- Bi Weekly Group Meetings
- Poster Presentation

Undergraduates:

- Interested in Research; whether Industry or Graduate School is intended
- Preferred: Junior, Senior, rising sophomore considered
- Completion of particular prep for major courses may be required.

Funded by:

MESA
Math • Engineering • Science
Achievement

San Diego Foundation

Project-SOAR

SDSU
San Diego State University

❖ Student Check-in

- 49 Students Actively Enrolled
- Avg GPA: 3.45
- Spring '23 Grads: 12 (proj.)

Community & Industry Partnership:

Mentor program partnership w/ SAME

Connect participants with Industry Professionals –
Building professional networks

COE Career Fair – 11 companies attended

T2E Grossmont Campus Visit April 26th, SDCC Campus Visit May 2nd

MVP Student Veteran Campus Introduction End of May



❖ Program Engagement

- Community Events: Welcome Back Mixer, monthly coffee hour, Veteran Graduation Celebration
- Information Sessions – NAVAIR, General Atomics, Northrop Grumman, ASML, NIWC, NAVFAC
- First Annual College of Engineering Career Fair
- Booz Allen Hamilton Networking Event & Facility Tour
- Spring Workshops: Resume Builder, Interview Prep, Job Search Strategies and Etiquette, Networking Fundamentals.
- T2E Stole Available after April 30th

❖ ENGR 101 Sec. 3

- 2 Sections in the Fall
- Goal setting, resume building, interview prep, social media revision, salary negotiations
- Networking & mentorship
- Bringing Industry partners to connect and help our students grow & prepare

Important Dates



Important Dates

Spring 2023

- **May 3 (Wed)** – 9:00am-12:00pm – **Dean's Advisory Board Meeting** – Templo Mayor
- **May 3 (Wed)** – 1:30pm-4:00pm – **Design Day** – Montezuma Hall
- **May 12 (Fri)** – 5:00 pm - **SDSU Graduate & Doctoral Commencement** – Viejas Arena
- **May 13 (Sat)** – 3:15pm-4:45pm – **Peggy Johnson's Honorary Doctorate Reception** –
Parma Payne Alumni Center
- **May 13 (Sat)** – 5:30 pm - **CoE Undergraduate Commencement** – Viejas Arena

Fall 2023

- **August 17 (Thu)** – 1:00pm-4:30pm – **CoE Retreat** – Templo Mayor, Conrad Prebys
Student Union
- **August 17 (Thu)** – 6:30pm-8:30pm – **CoE Gathering** – Tom Ham's Lighthouse

CoE Constitution & Bylaws



Constitution and Bylaws

Constitution and Bylaws - Appendix A (Assigned Time)

10/11/22

Motion:

The COE CBC is asked to incorporate further faculty input towards a revision of the proposed draft of the ATP (which is comparable to the COS ATP) before March 30 2023, so that it can be voted on upon before end of AY 2022-2023, after discussion in all COE meetings before the voting date.

Thank you!

