



SAN DIEGO STATE  
UNIVERSITY

# COLLEGE OF ENGINEERING

## FACULTY MEETING

OCTOBER 14, 2021

# AGENDA



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- ☐ **Call to Order**
  - ☐ **Faculty Secretary present for minutes?**
- ☐ **Announcements & Updates**
  - ☐ **Engineering Staff Updates**
  - ☐ **Engineering Development Update**
- ☐ **State of the College**
  - ☐ **College Personnel Update**
  - ☐ **Research & Graduate Program Update**
  - ☐ **Undergraduate Program Update**
  - ☐ **Community & Communication**
  - ☐ **Update on DEI Council**
  - ☐ **Important Dates to Remember**
- ☐ **Other Business**
  - ☐ **Approval of 8/19/21 CoE Faculty Retreat Minutes**
- ☐ **Adjournment**



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# ANNOUNCEMENTS & UPDATES

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# DEVELOPMENT UPDATE



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## ○ **Development Goal FY2020-2021**

- Goal - \$4,000,000 – we raised \$6,500,000

## ○ **College Endowment**

- In 2018 it was \$11.2M in 2021 it's \$23M
- In 2018 we had 29 endowed funds and today we have 46
- Those endowed funds can be found on the website at:  
<https://www.engineering.sdsu.edu/giving/endowedfunds.aspx>

## ○ **What can you do as faculty?** Build relationships with industry partners, alumni, donors and friends

## ○ **Development Priorities**

- Faculty Chairs and Professorships
- Scholarship Support
- Diversity, Equity & Inclusion Initiatives
- AGC Chair in Construction Management
- Mechanical Engineering Support
- Aztec Electric Racing
- Naming the College of Engineering

**\*Keck Foundation** – You must **show proof** of refusal from NSF or etc. and the proposal has to be **basic foundational science, not application**



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# STATE OF THE COLLEGE



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# UPDATE ON COLLEGE PERSONNEL

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# ENGINEERING STAFF UPDATES

**Congratulations and Welcome! Effective Fall 21!**



**Melinda Sevilla**

CoE Communications Lead

Marketing Manager at Wildcat Discovery Technologies  
*MA in Communication (Meditated Communication & Technology),  
University of Illinois at Urbana-Champaign  
BA in Communications Studies and Spanish, University of San Diego*



**Julie Smitherman**

Assistant to the CoE Dean

SDSU Mechanical Engineering Coordinator  
*BA in Art History, Southern Methodist University*

# FACULTY SEARCHES FOR 2021 - 22



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Searches Funded by College

Department	Position Area	Level
CCEE	Department Chair	Full
CCEE	Environmental Engineering	Assistant
ECE	Endowed Chair in Digital Signal Processing	Full
ECE	Renewable Energy	Assistant
ME	Advanced Manufacturing	Assistant
ME	Energy Storage	Assistant

Searches Funded Centrally



# TENURED/TENURE-TRACK FACULTY

	AE	CCEE	ECE	ME	CoE
Professors	7	4	9	9	29
Associate Professors	1	5	4	3	13
Assistant Professors	4	10	7	10	31
Fall 2019 T/T Faculty	12	19	20	22	73*
New Fall 2021 Positions	0	2	2	2	6
Total T/T Faculty*	12	21	22	24	79*

\* Includes participants in Faculty Early Retirement Program (FERP)

# GENERAL DATA: SDSU CoE



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<input type="checkbox"/> Undergraduate Enrollment, Fall 2021:	3289 (20.3% W)
<input type="checkbox"/> Graduate Enrollment, Fall 2021:	290 (26.6% W)
<input type="checkbox"/> Total Degrees Granted, 2020-21:	800 (23.0% W)
<input type="checkbox"/> Undergraduate Degree Programs:	8
<input type="checkbox"/> Graduate Degree Programs:	13

**2022 US NEWS and World Report: SDSU College of Engineering is 6 positions up!**



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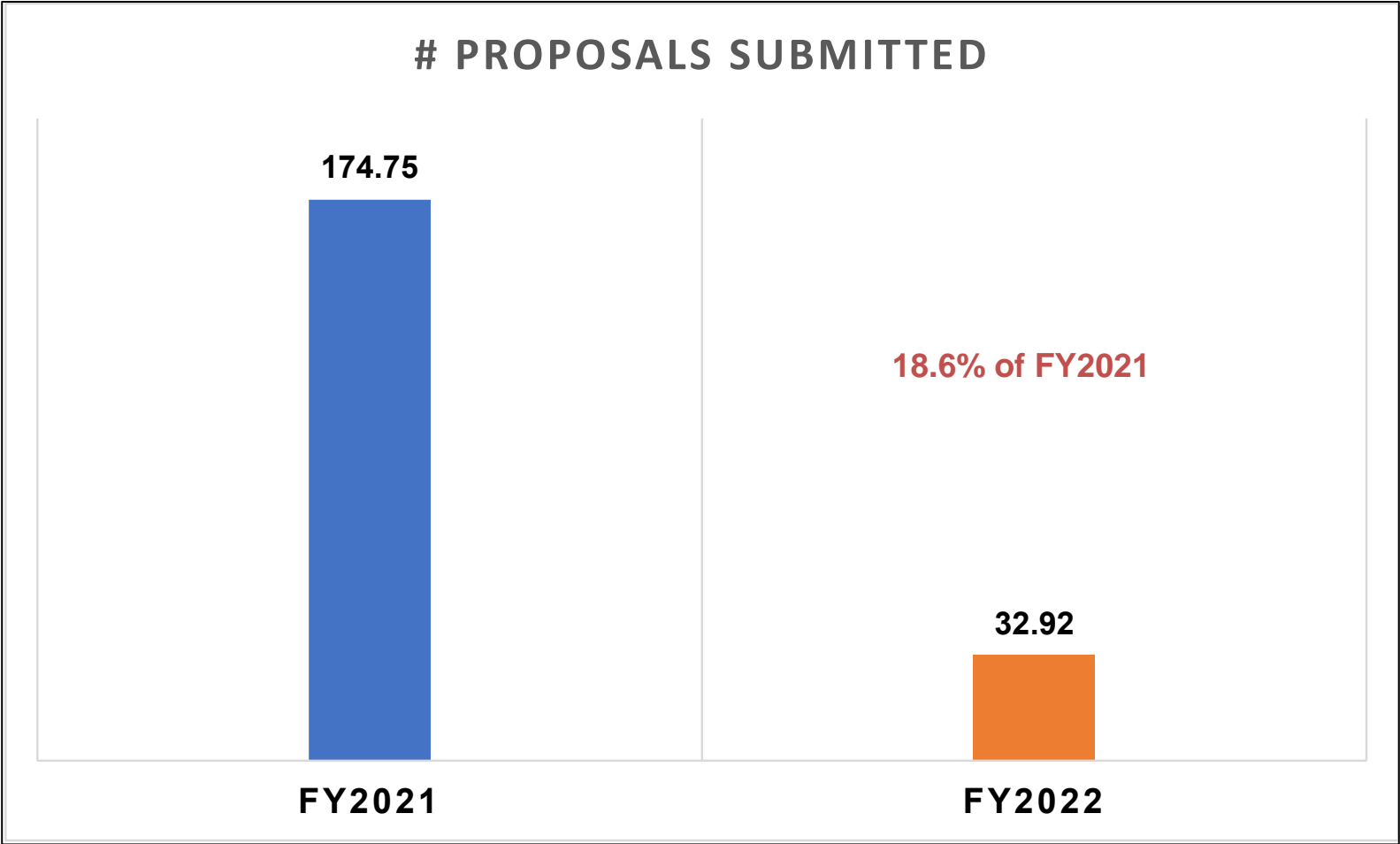
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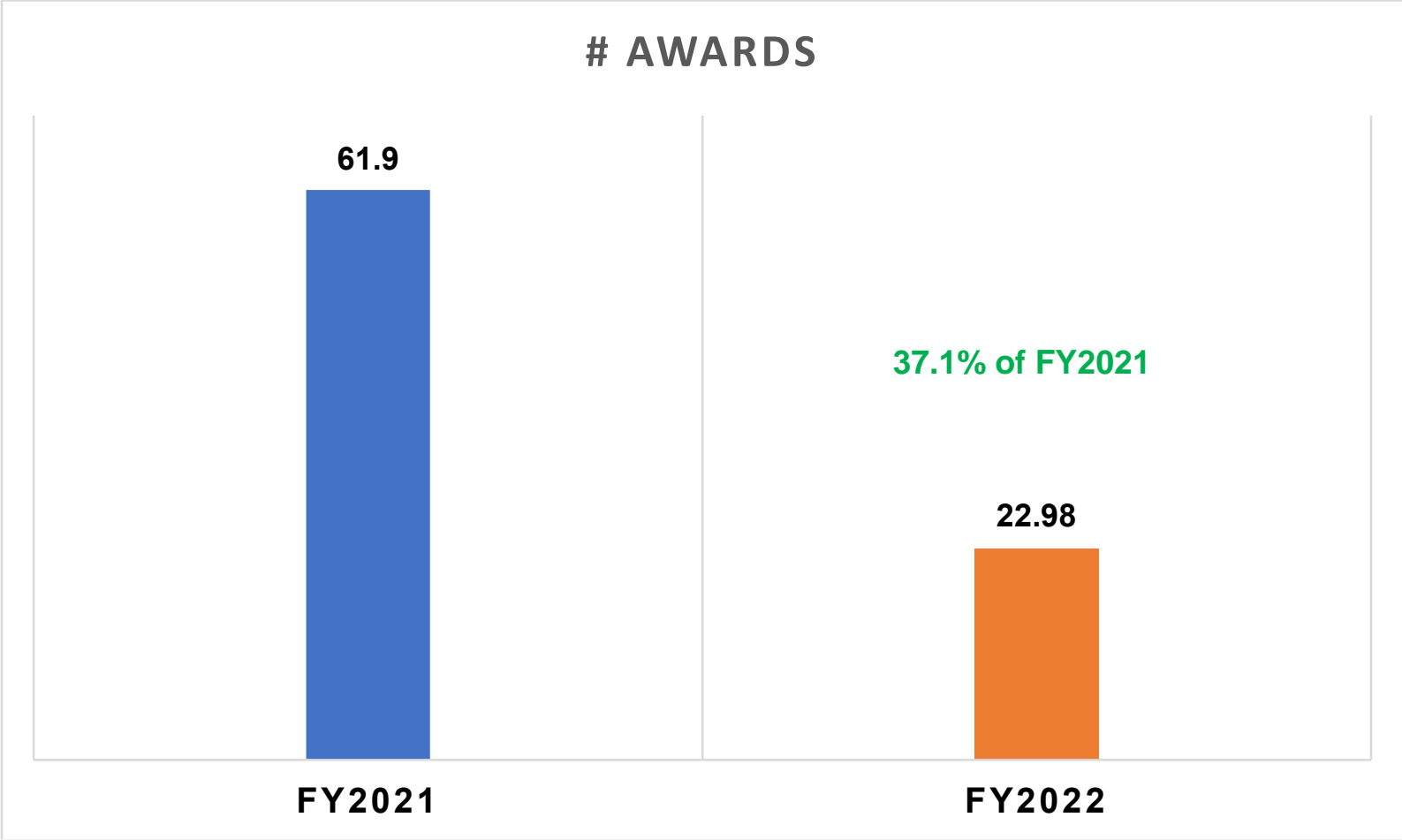
# RESEARCH & GRADUATE PROGRAM UPDATE

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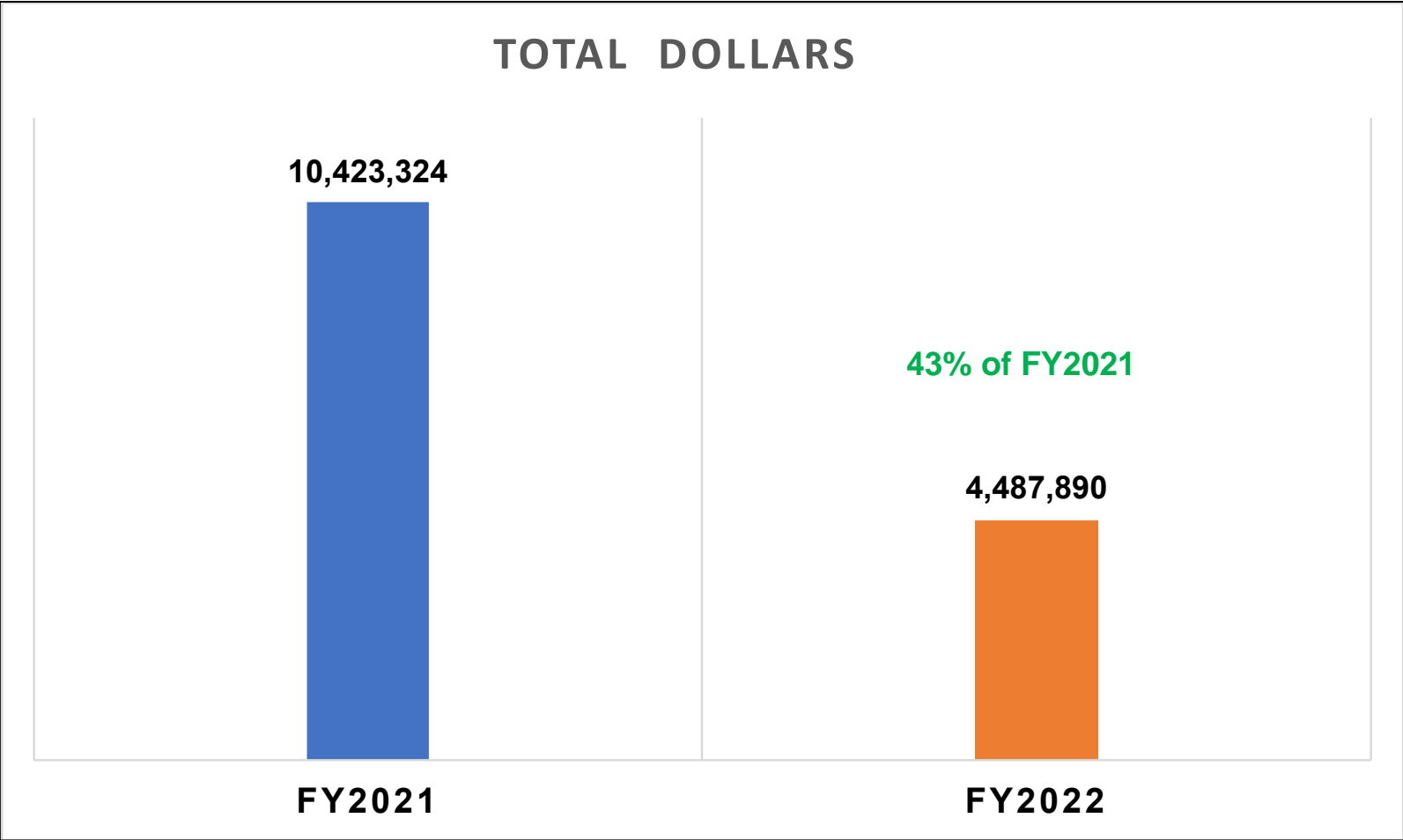
# RESEARCH DATA - PROPOSAL SUBMISSION (07/01/21 – 09/30/2021)



# RESEARCH DATA – AWARDS (07/01/21 – 09/30/2021)



# RESEARCH DATA – AWARDS (07/01/21 – 09/30/2021)

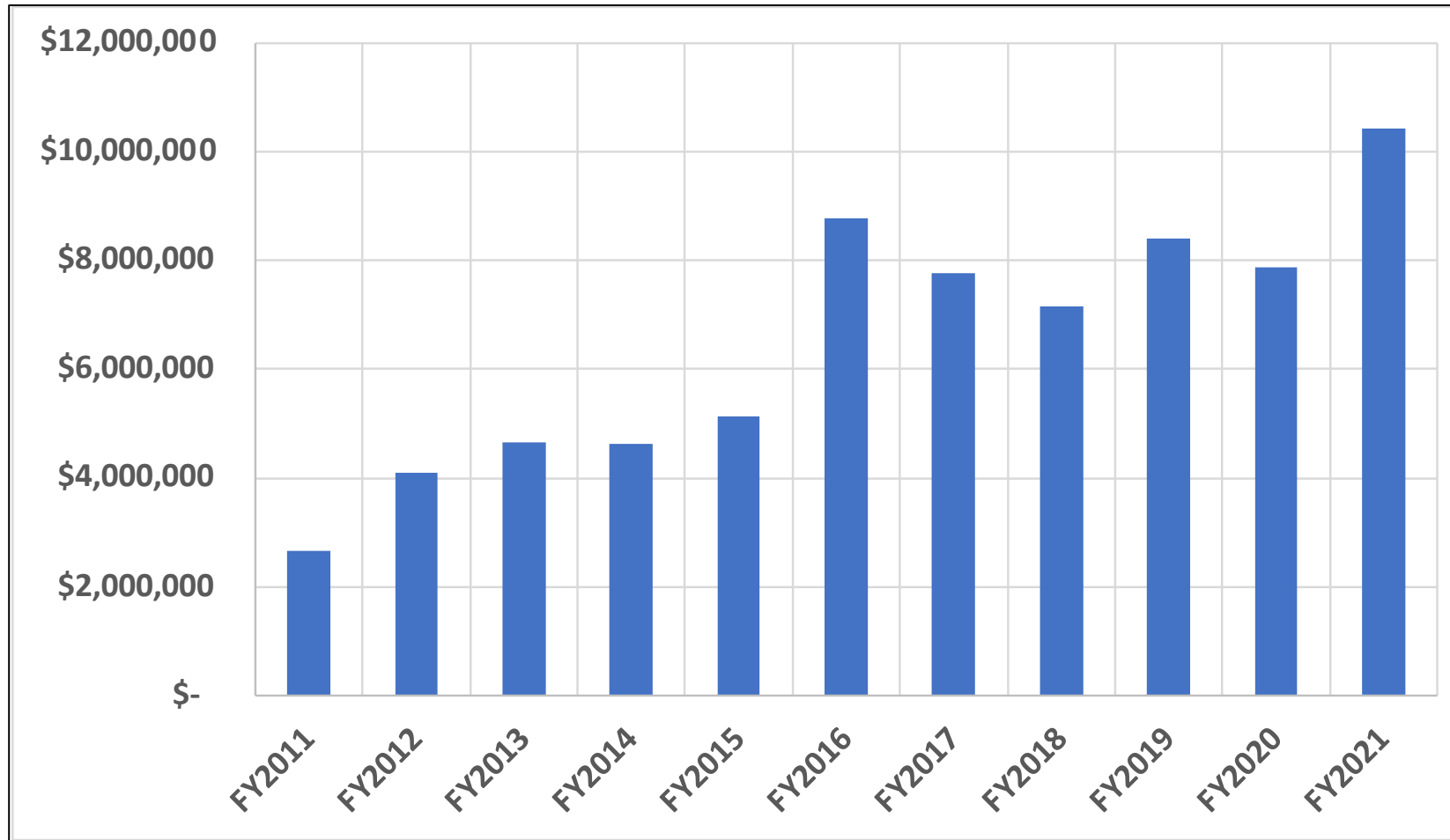


# HISTORICAL DATA - TOTAL DOLLARS



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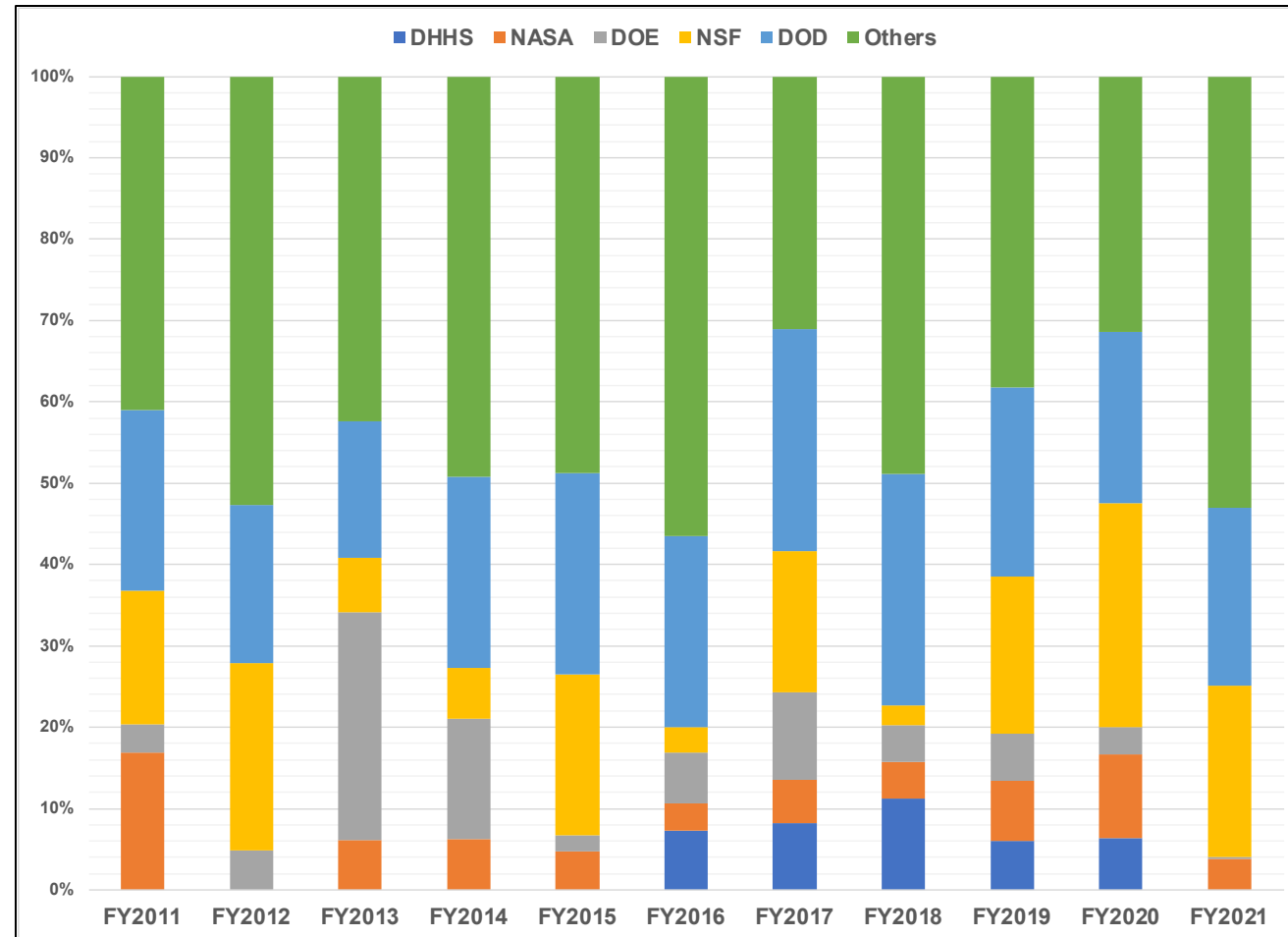


# HISTORICAL DATA — BY FUNDING AGENCIES



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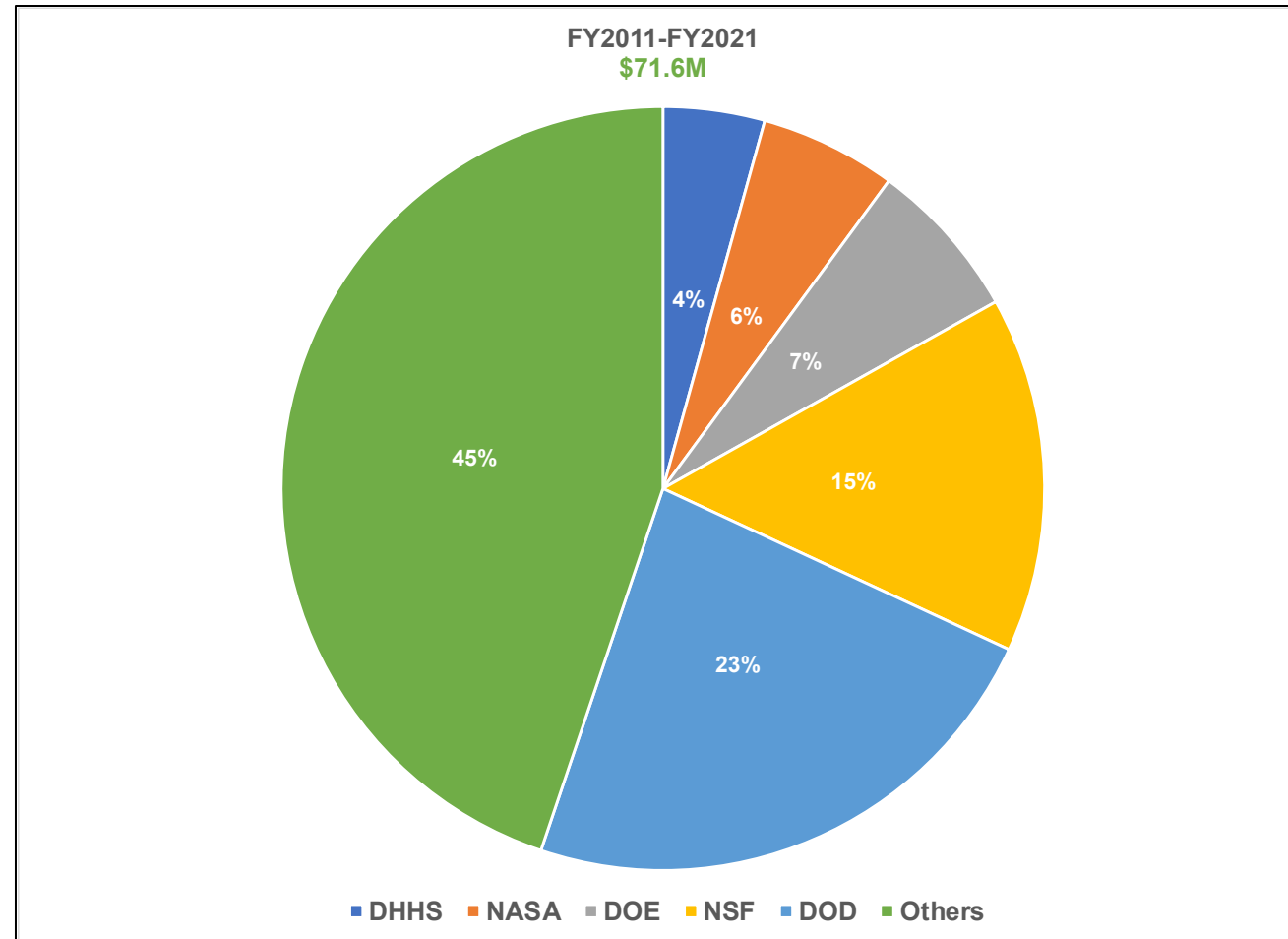


# HISTORICAL DATA — BY FUNDING AGENCIES



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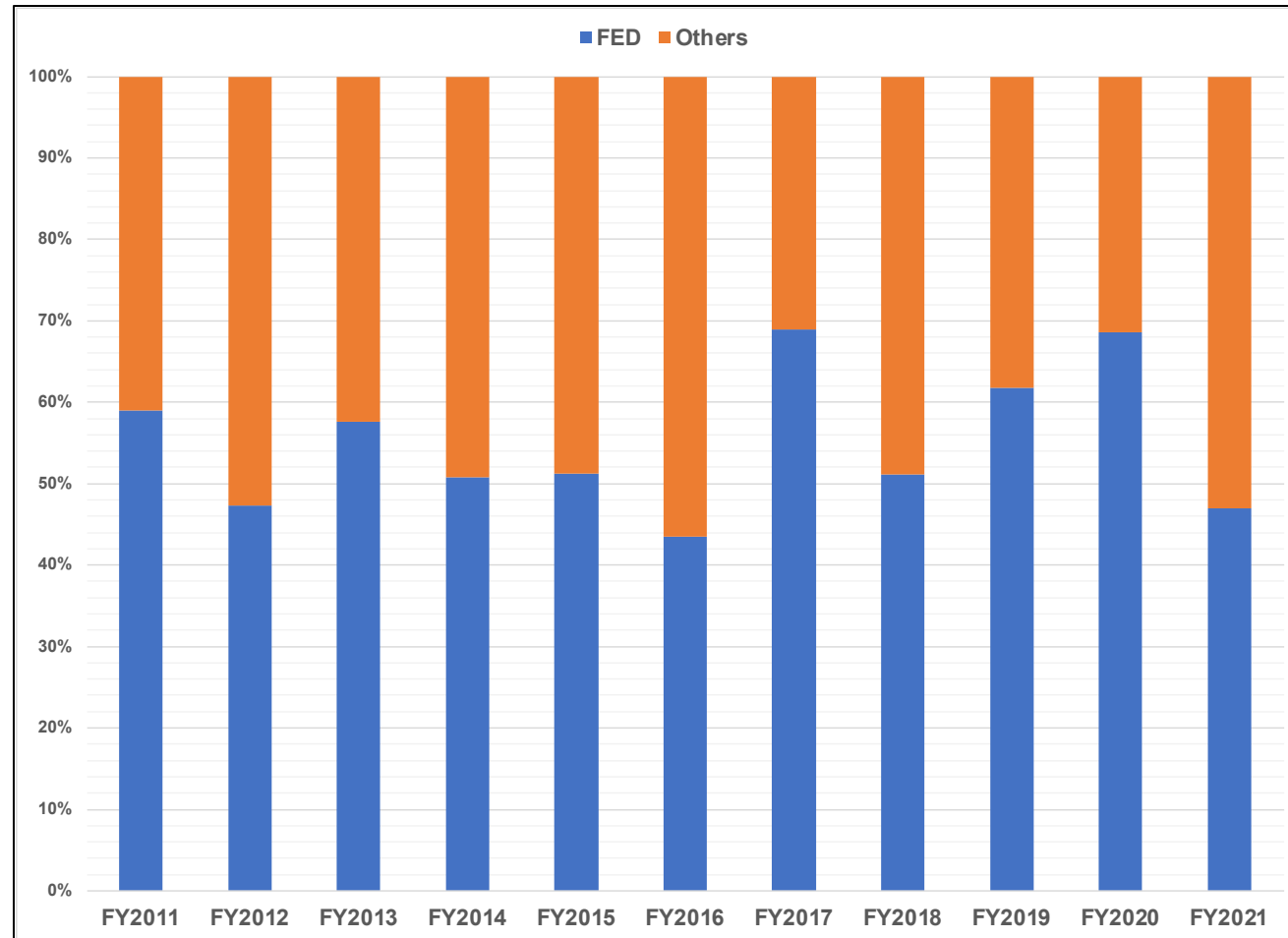


# HISTORICAL DATA — FEDERAL VS. OTHERS



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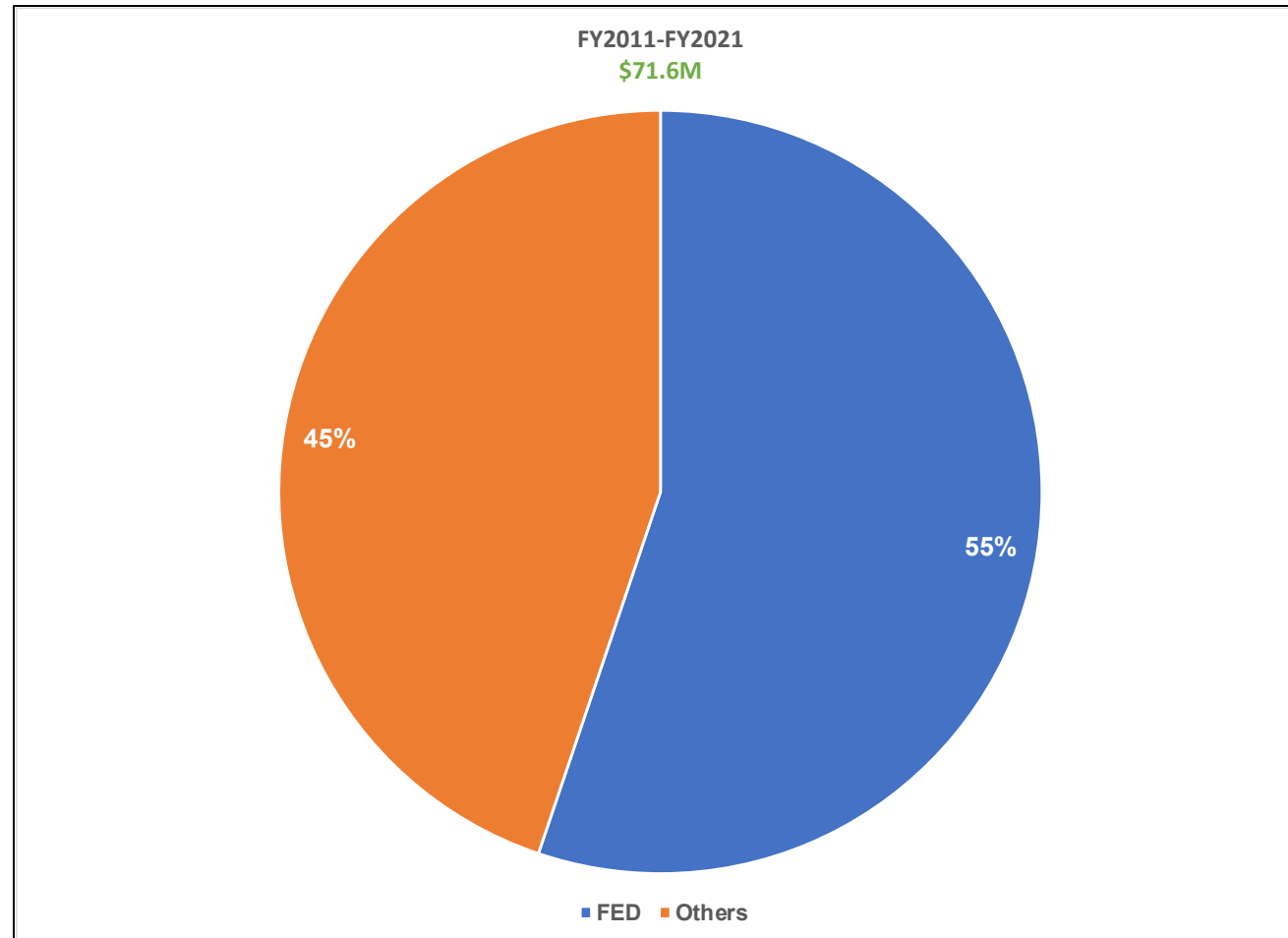


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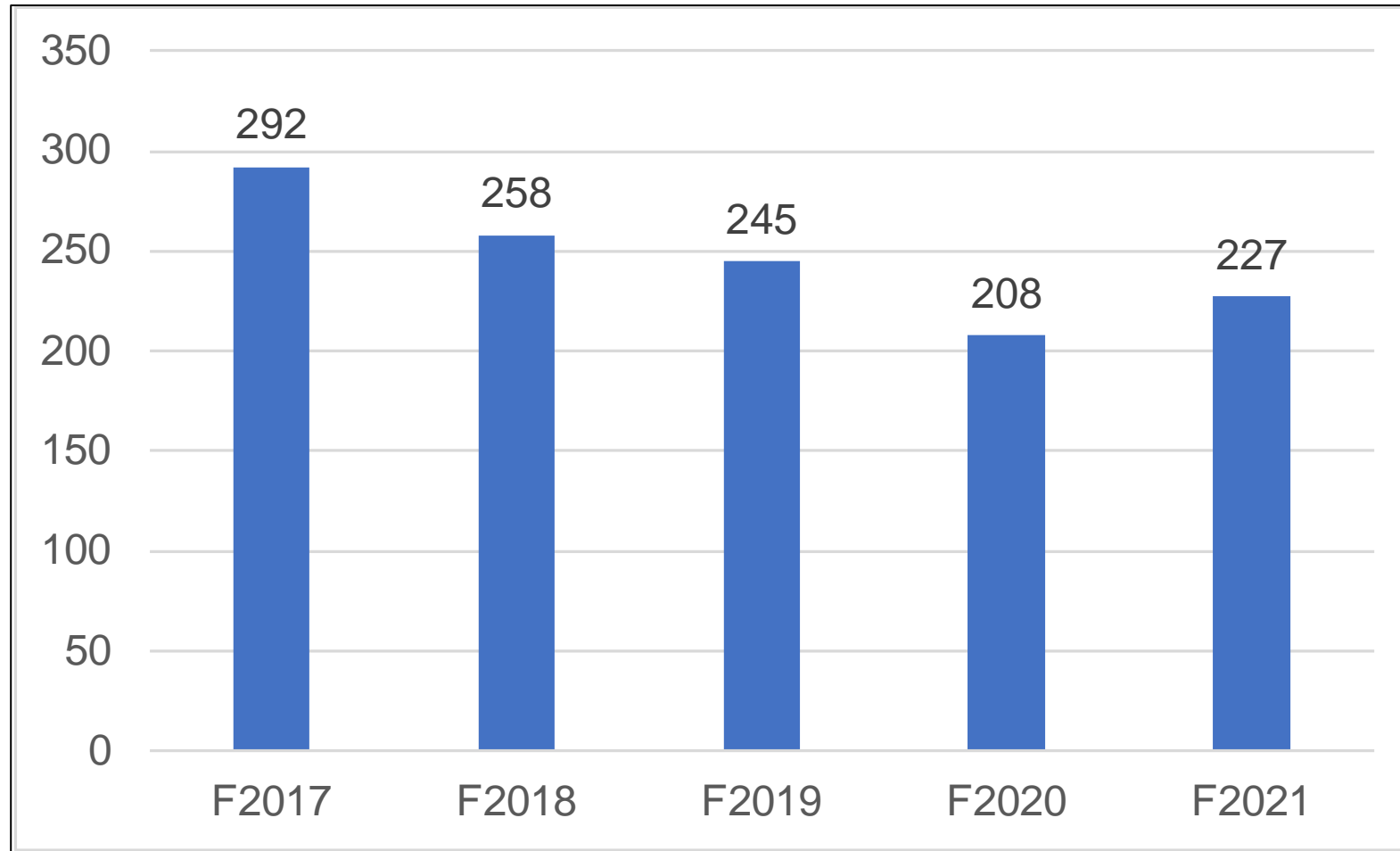


# MASTER'S PROGRAMS ENROLLMENT



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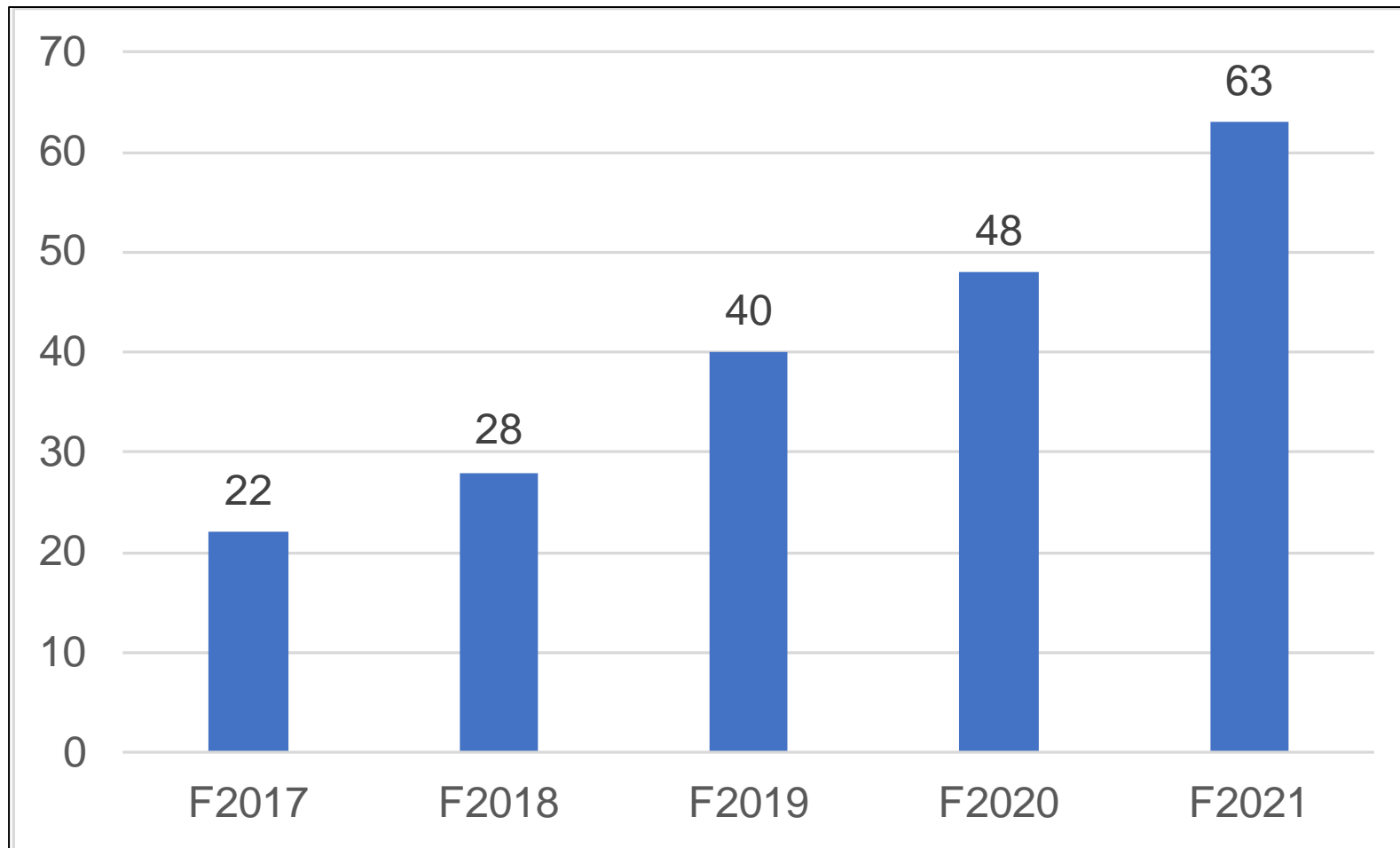


# ENGINEERING JDP ENROLLMENT



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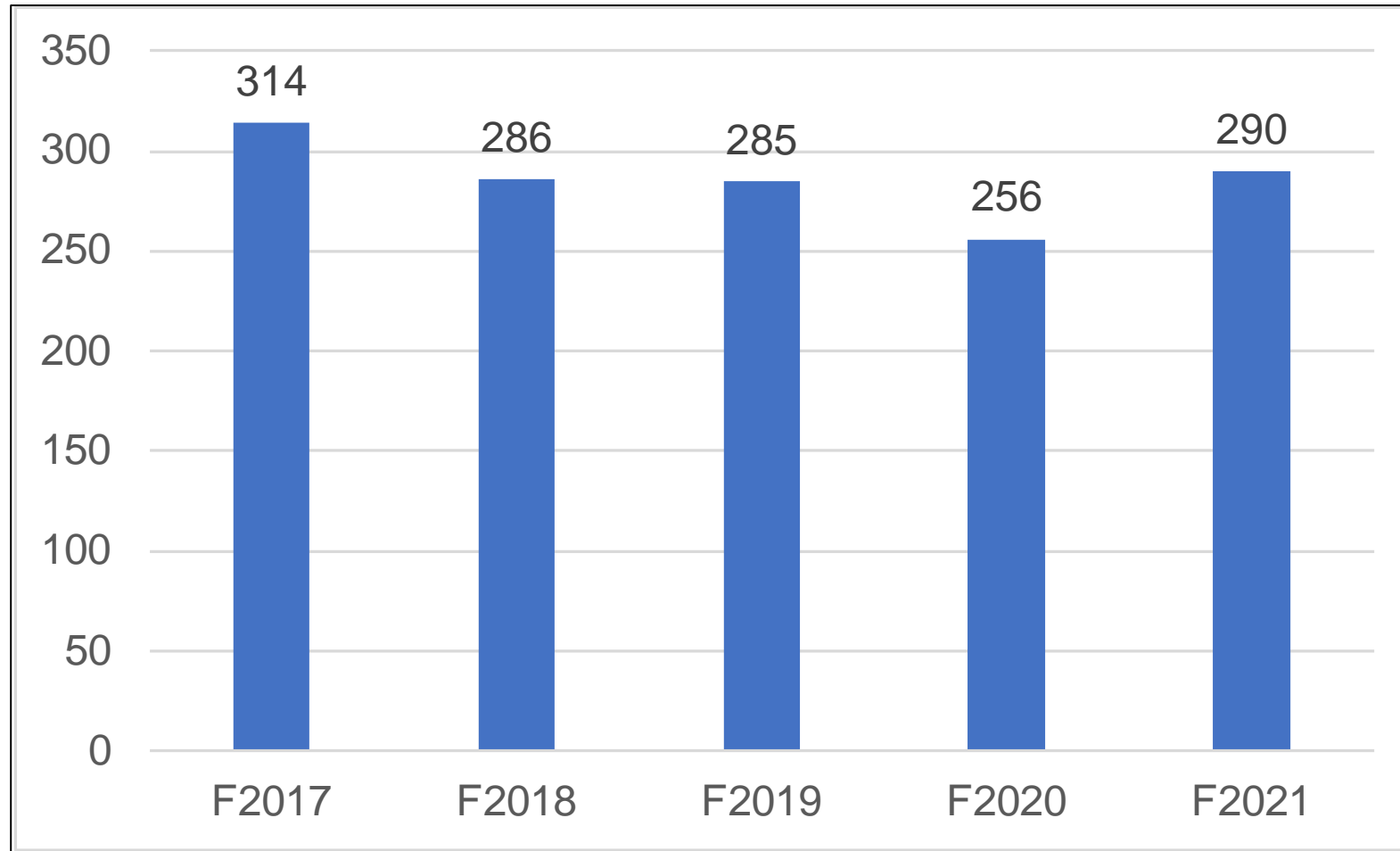


# GRADUATE PROGRAMS TOTAL ENROLLMENT



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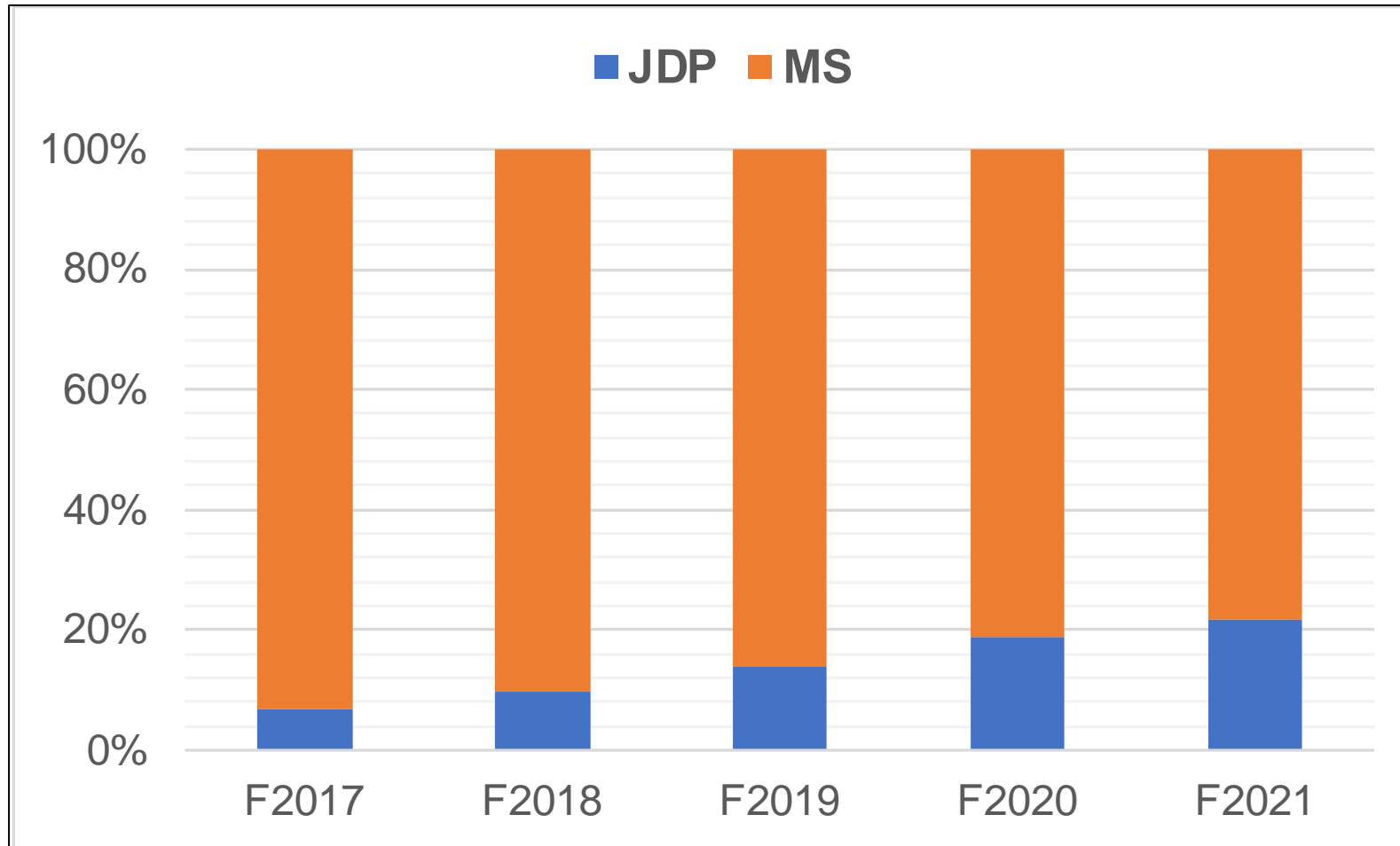


# GRADUATE PROGRAMS TOTAL ENROLLMENT



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**Engineering JDP Excellence fee** - These funds are used to enhance student academic support services, advisement, and experience both in and out of the classroom. The funds are also used to organize workshops that focus on the preparation of fellowship applications. In addition, the funds support graduate students training to improve their participation and competitiveness in securing research funding, preparing graduate students to become the next generation of scholars and career professionals.



# TUITION FEE CONTRIBUTION FROM GRANTS MANAGED BY SDSURF



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<b>Contribution per Resident Student (use "Engineering JDP Excellence fee" as a line-item budget)</b>	<b>~\$500 (2022/23 AY)</b>
<b>Contribution per Nonresident Student (use "Engineering JDP Excellence fee" as a line-item budget )</b>	<b>~\$1,800 (2022/23 AY)</b>
<b>Mandatory Campus Fee</b>	<b>~\$2,400 (2022/23 AY)</b>

## NOTE:

1. Difficult to accurately estimate tuition fee contribution; consider including annual escalation rate of 3%
2. Mandatory campus fee can not be paid from state funds, e.g., startups
3. Part-Time, 6.0 or fewer units

# GRADUATE PROGRAM FAIR



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- Organizers
  - College of Engineering Student Council
  - Graduate advisors
  - COE DEI
- Faculty participation is highly encouraged



The poster is for the Graduate Program Fair at San Diego State University, College of Engineering. It features a red and brown color scheme. At the top right is the university logo. The title 'GRADUATE PROGRAM FAIR' is in large, bold, black letters. Below it, the date 'November 9, 2021' is in red, followed by 'Kickoff Reception: 12-1 pm' and 'Information Session: 1-4 pm' in black, and 'Location: Scripps Cottage' in red. A red graduation cap is on the right. Below the title, it says 'MAKE VALUABLE CONNECTIONS' and 'LEARN ABOUT FURTHERING YOUR EDUCATION:' in bold. A list of opportunities follows: 'Undergraduate research opportunities', 'Grad school preparation', 'Grad research opportunities', 'Career opportunities after grad school', and 'Financial assistance'. At the bottom left, it says 'register to learn more!' next to a QR code placeholder. At the bottom right is the CESC logo (College of Engineering Student Council) and the text 'OPEN TO ALL SDSU MAJORS'.

**GRADUATE PROGRAM FAIR**

November 9, 2021  
Kickoff Reception: 12-1 pm  
Information Session: 1-4 pm  
Location: Scripps Cottage

**MAKE VALUABLE CONNECTIONS  
LEARN ABOUT FURTHERING YOUR EDUCATION:**

- Undergraduate research opportunities
- Grad school preparation
- Grad research opportunities
- Career opportunities after grad school
- Financial assistance

register to learn more!

qr code

**OPEN TO ALL SDSU MAJORS**

**CESC**  
College of Engineering Student Council



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# UNDERGRADUATE PROGRAM UPDATE

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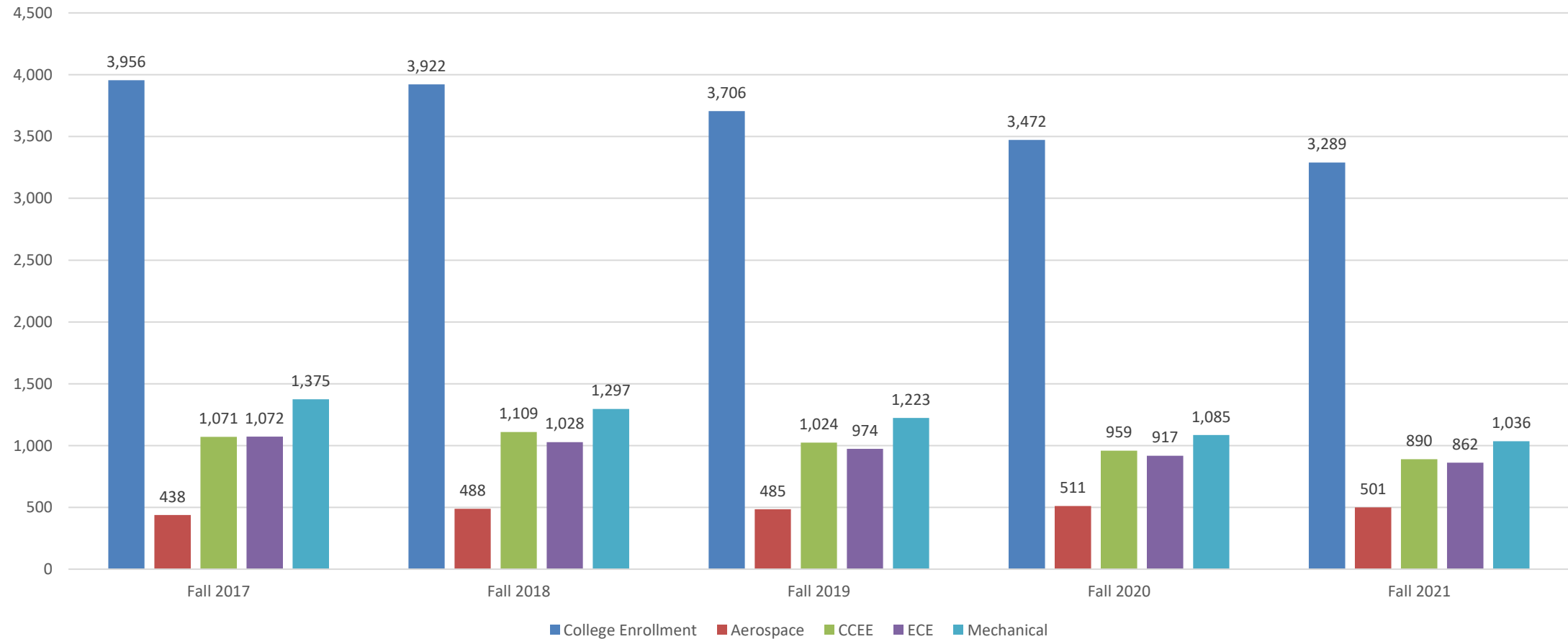
# ENROLLMENT TRENDS



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Enrollment Trends



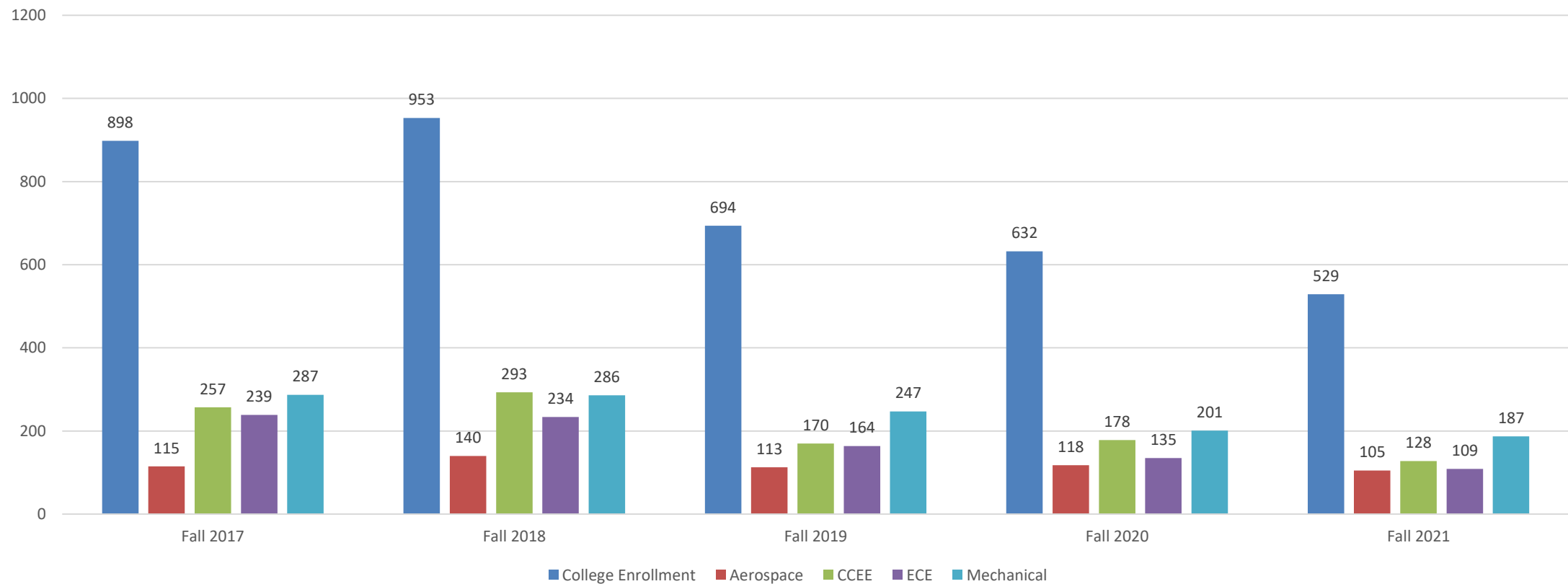
# FRESHMAN ENROLLMENT TRENDS



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Freshman Enrollment Trends



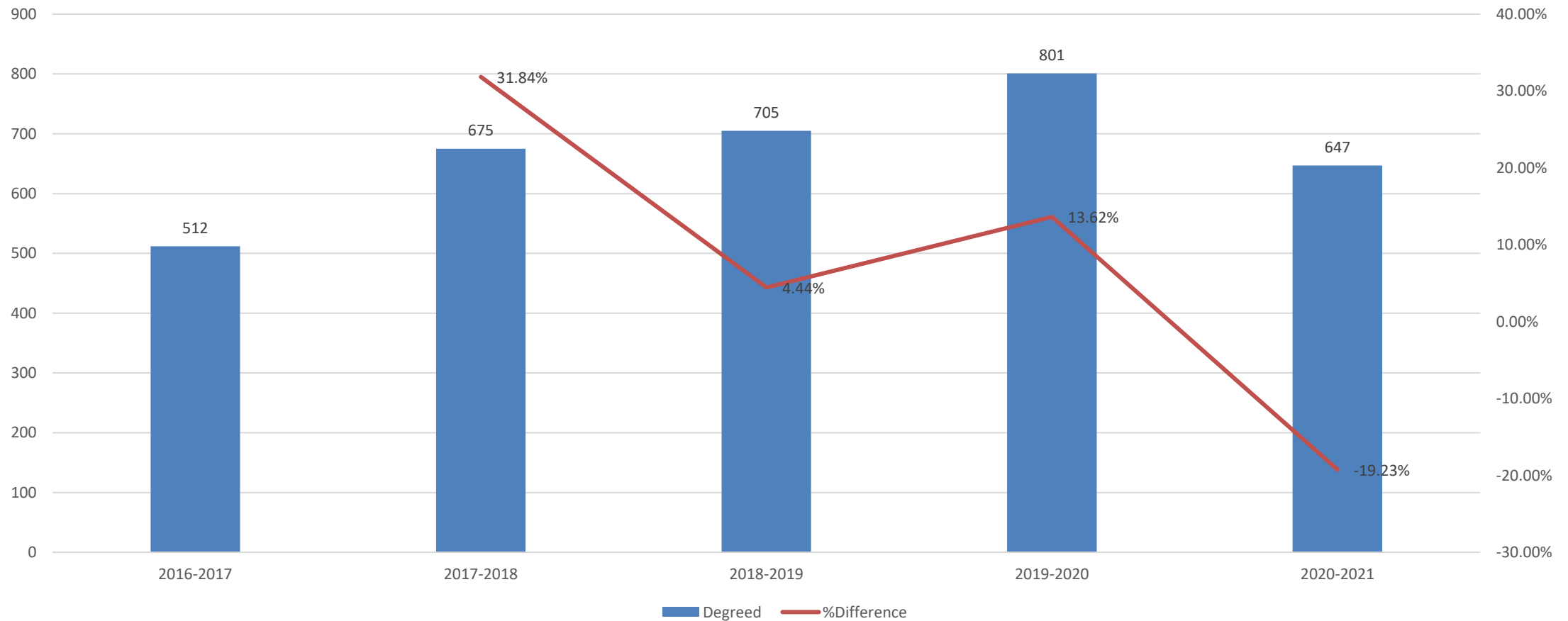
# UNDERGRADUATE DEGREES GRANTED



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Undergraduate Degreed Granted

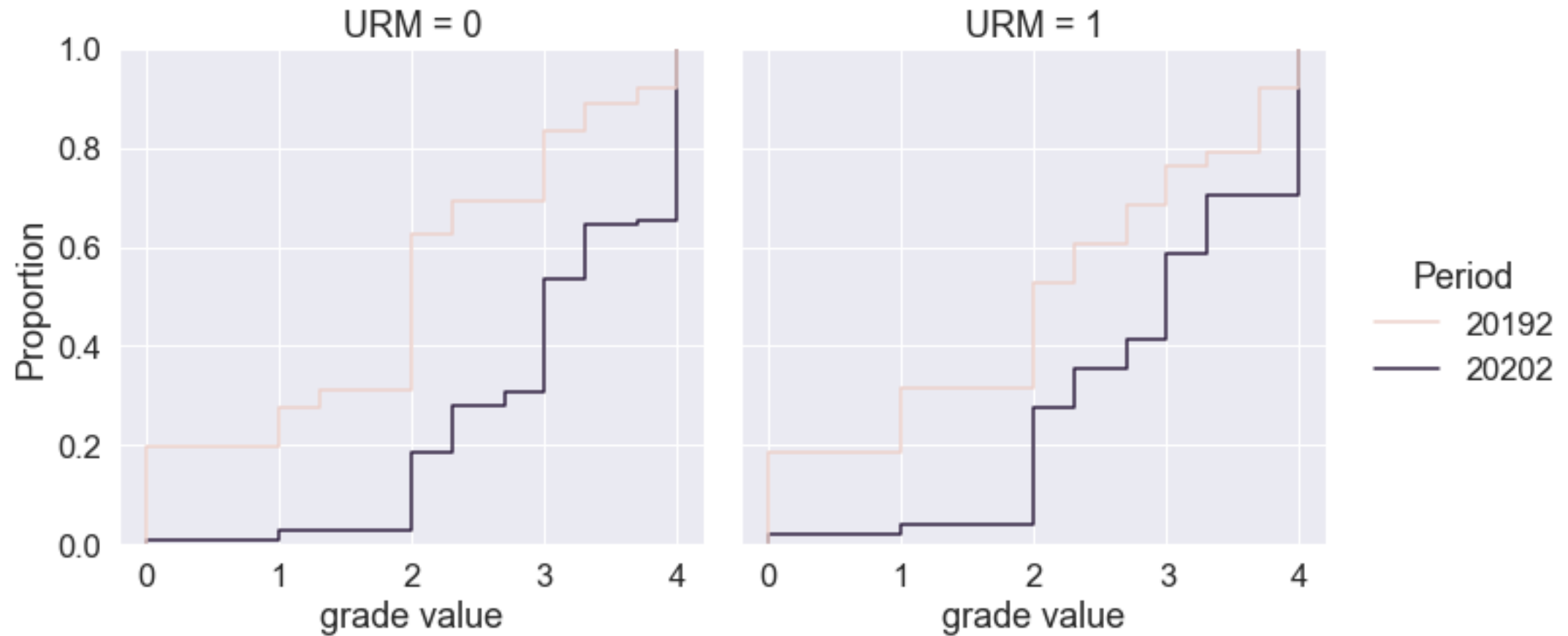


# STUDENT SUCCESS 20192 vs 20202 (200 LEVEL COURSE)



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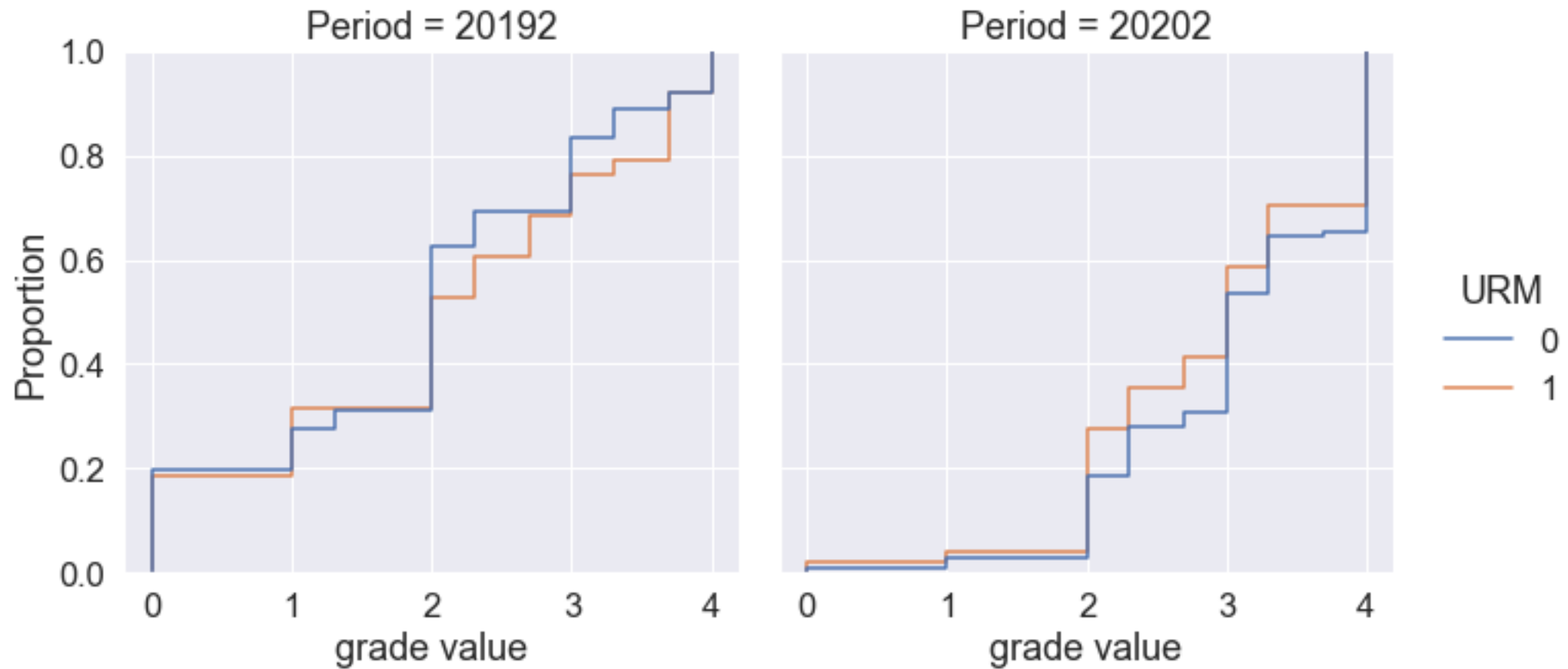


# STUDENT SUCCESS 20192 vs 20202 (200 LEVEL COURSE)



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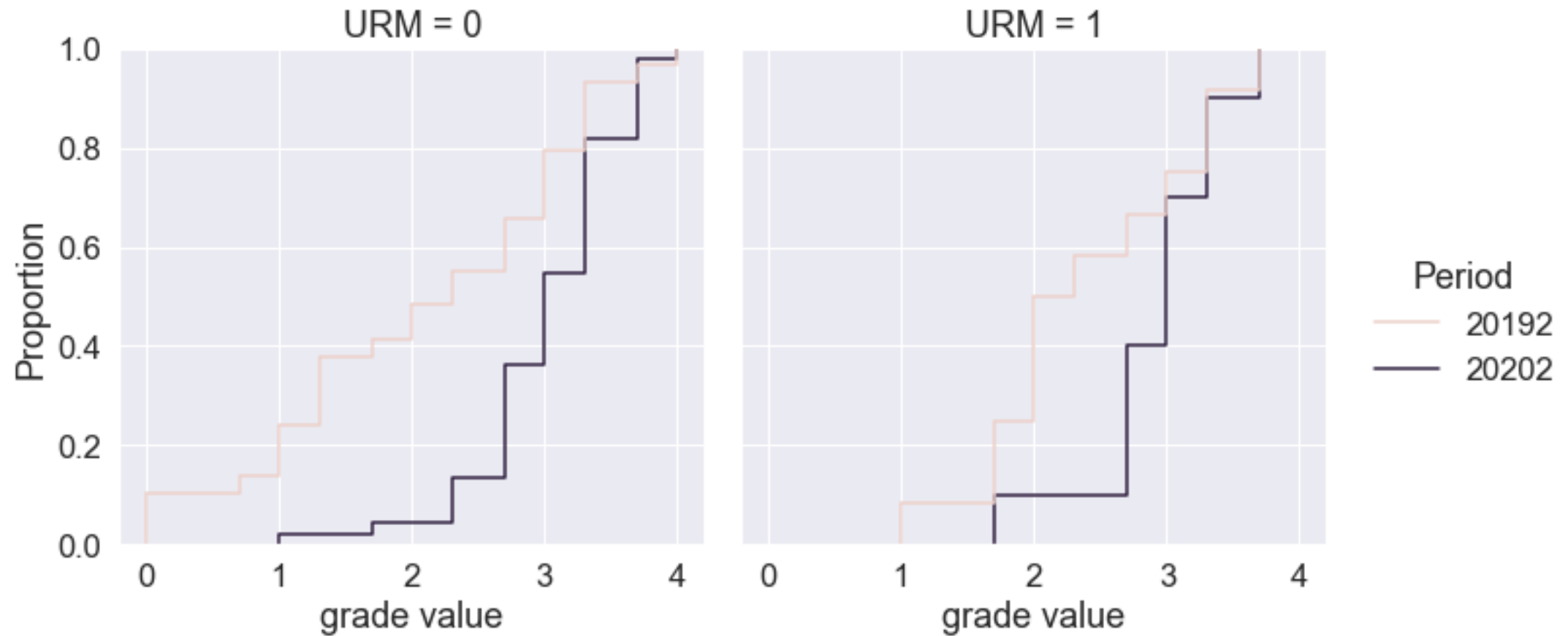


# STUDENT SUCCESS 20192 vs 20202 (400 LEVEL COURSE)



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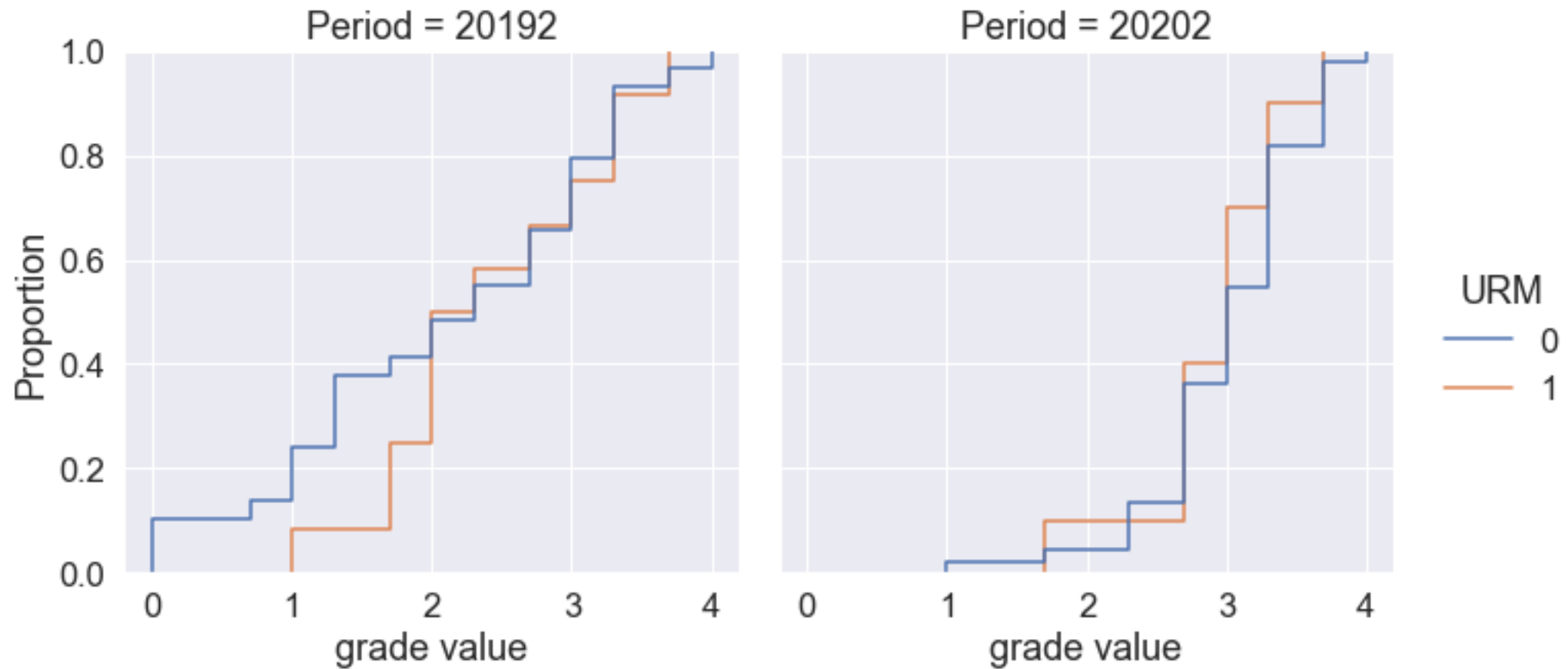


# STUDENT SUCCESS 20192 vs 20202 (400 LEVEL COURSE)



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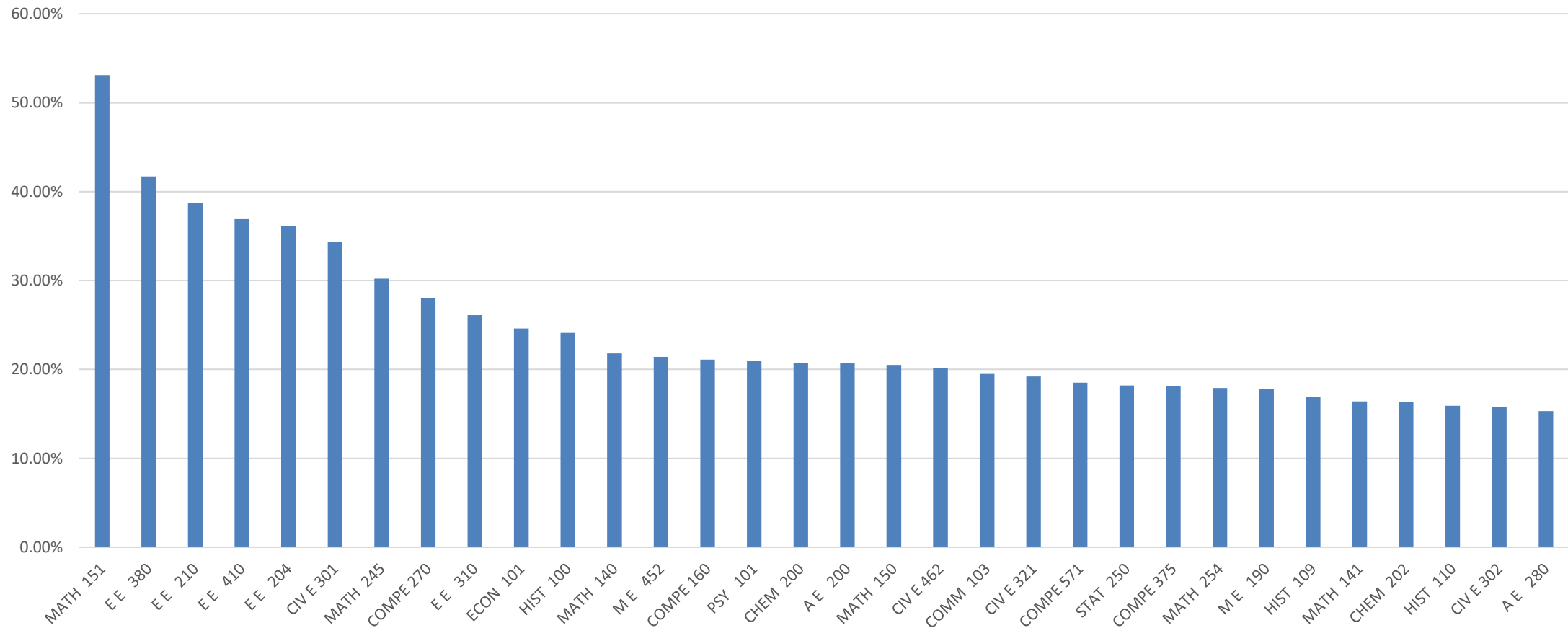
# BOTTLENECK CLASSES



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Highest DFW Courses Attended by Engineering Students in Fall 2020



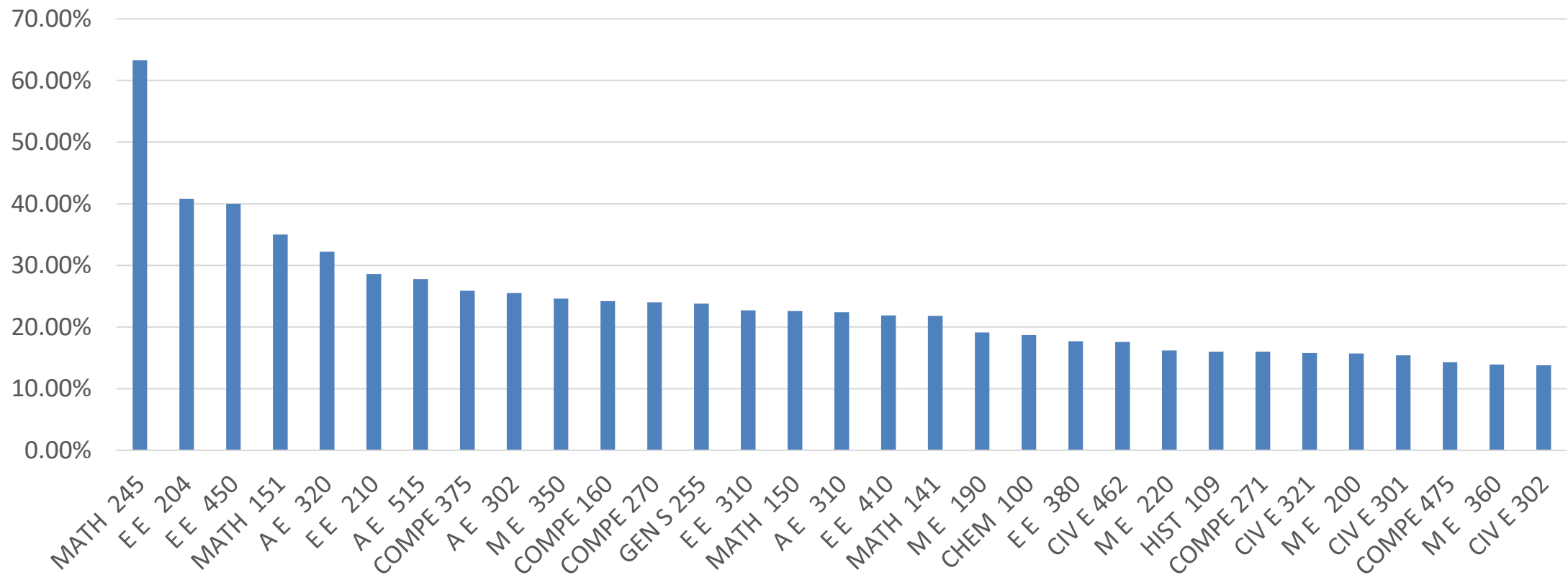
# BOTTLENECK CLASSES



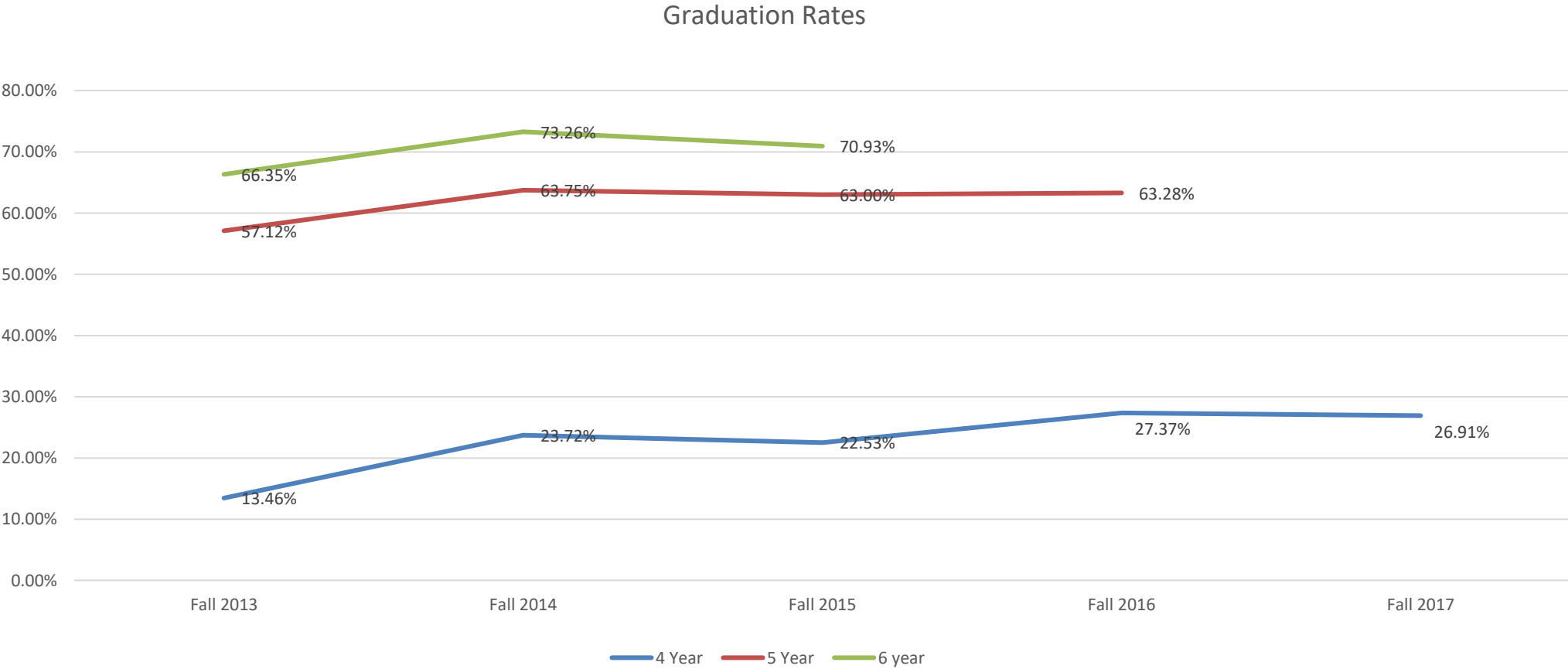
SAN DIEGO STATE  
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Highest DFW Courses Attended by Engineering Students in Spring 2021



# COLLEGE GRADUATION RATES

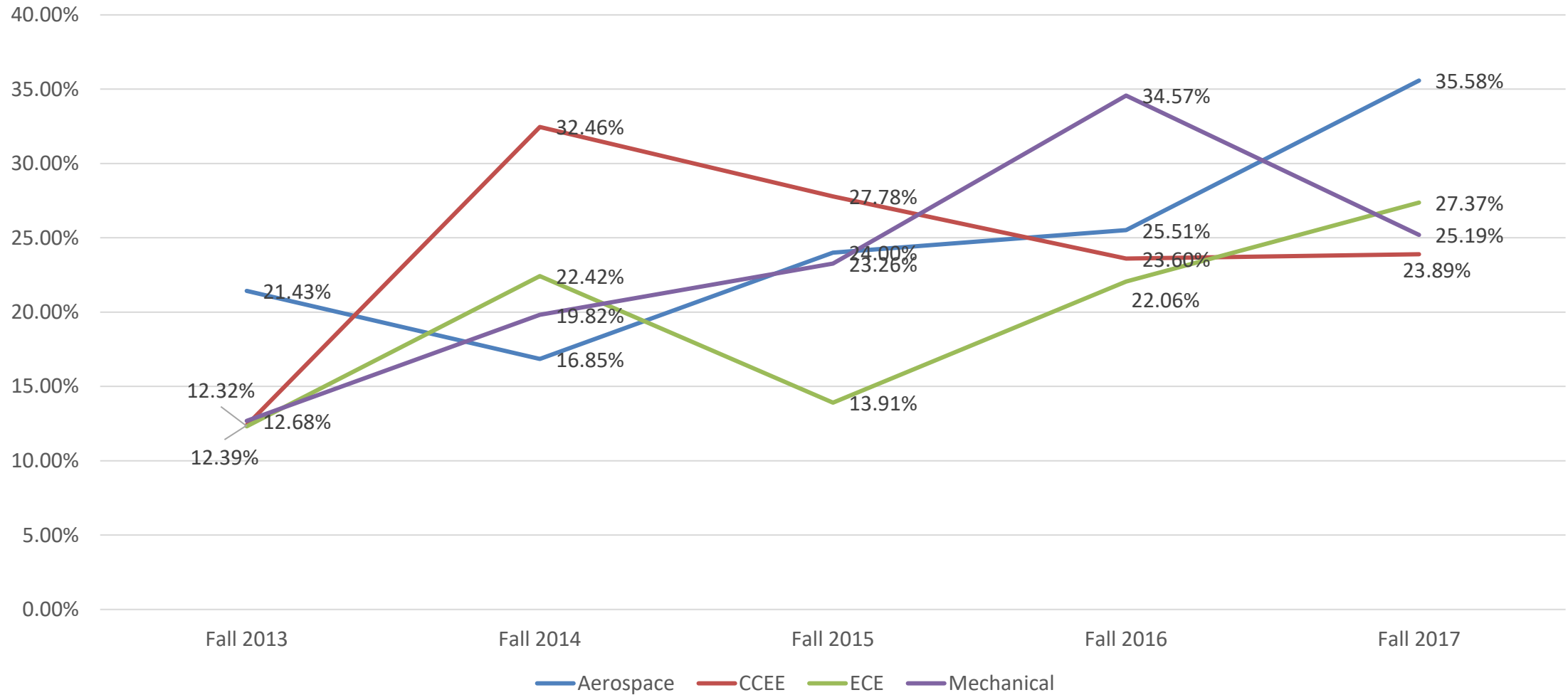


# FOUR YEAR GRADUATION RATES



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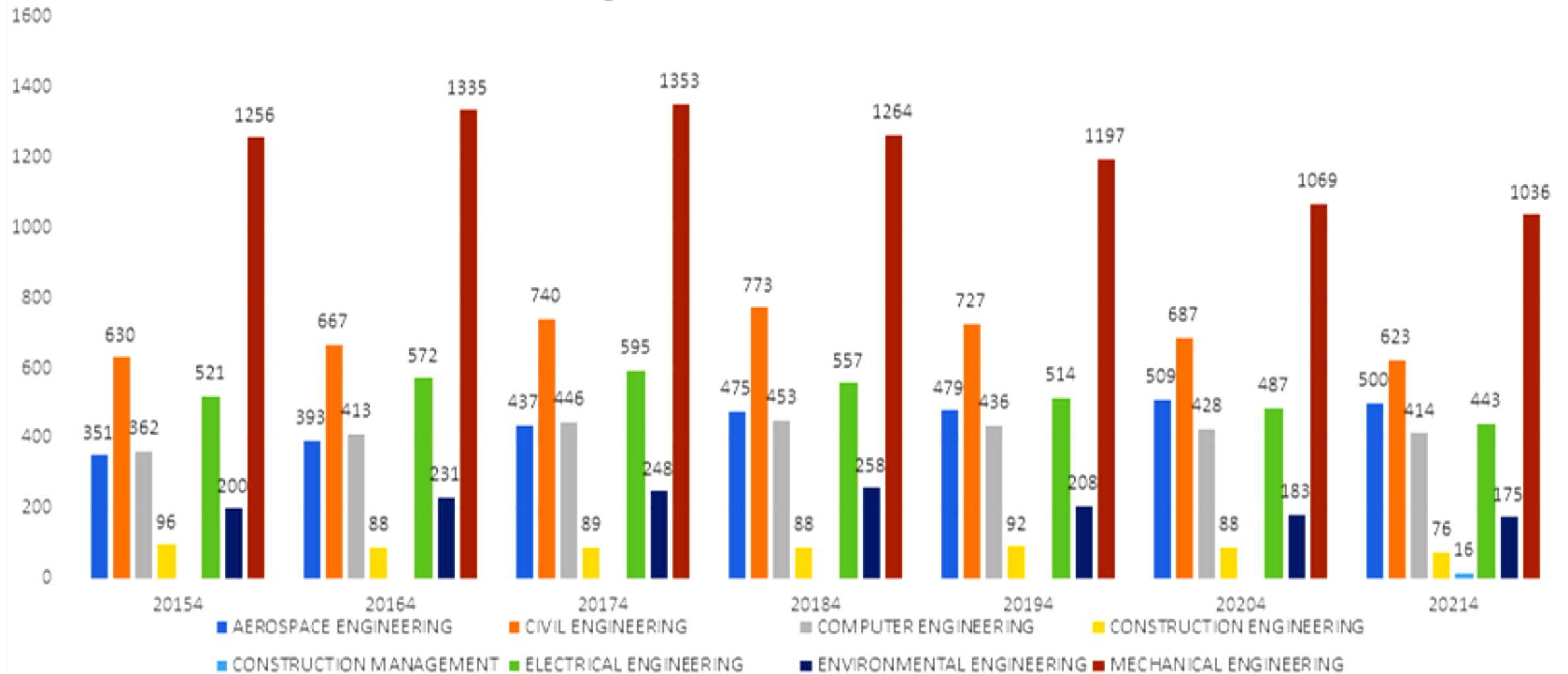


# UNDERGRADUATE ENROLLMENT - FALL



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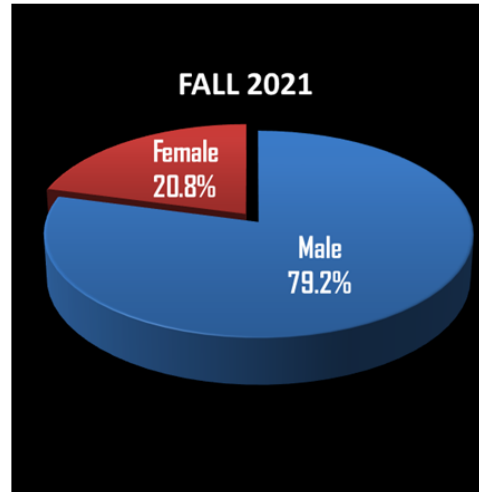
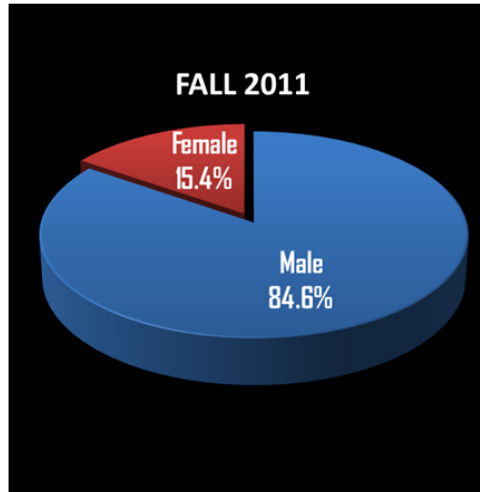


# STUDENT DEMOGRAPHICS



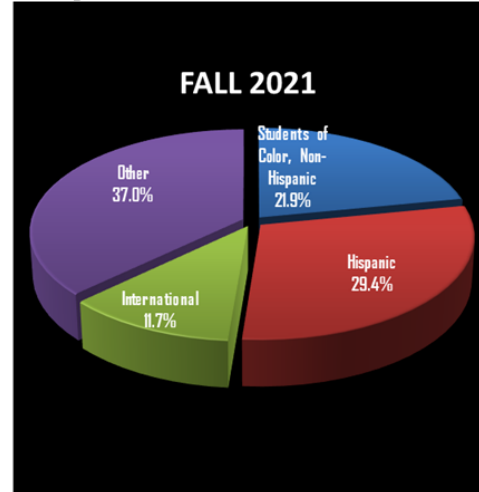
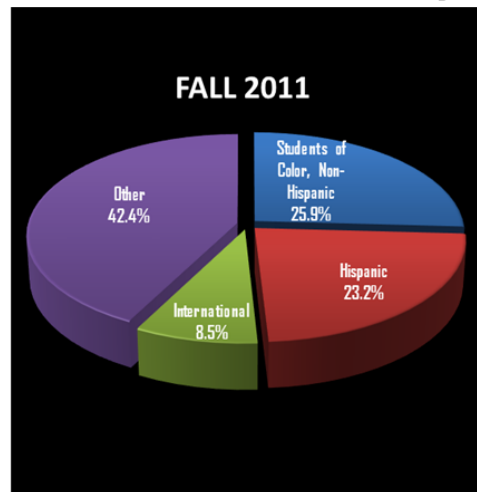
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## By Gender



Female Students:  
15.4% → 20.8%

## By Ethnicity



Hispanic Students:  
23.2% → 29.4%

International Students:  
8.5% → 15.4% → 11.7%  
(pre-COVID)



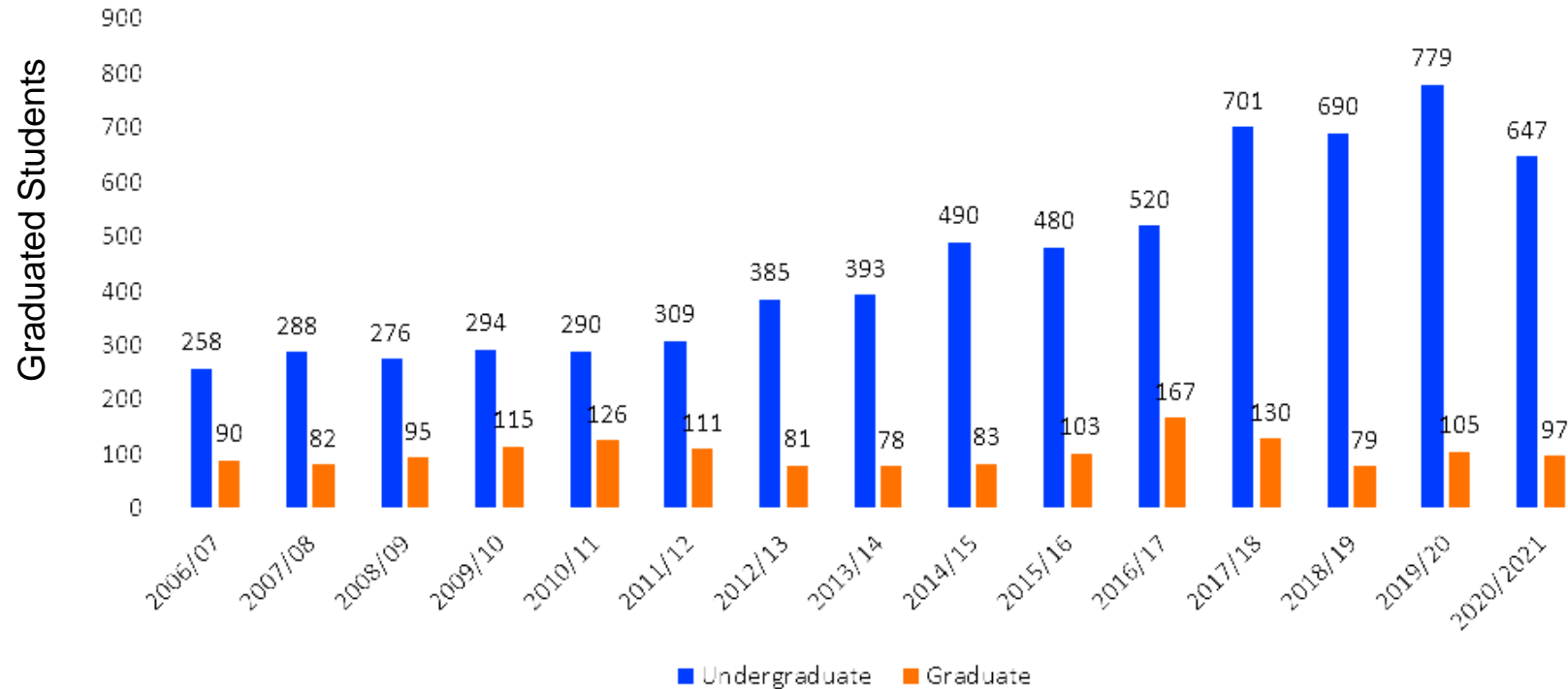
# GRADUATION TRENDS



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COLLEGE of ENGINEERING - Graduation



ASEE National Rankings:  
Workforce Generation

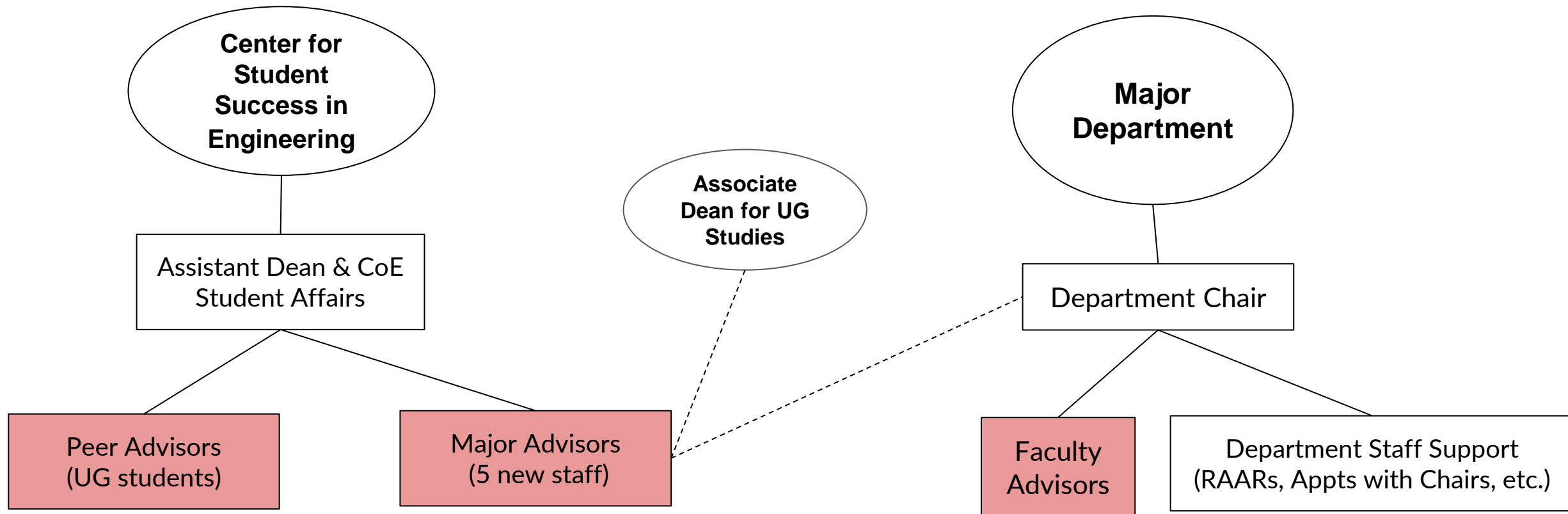
College of Engineering	47 out of 423
Civil Engineering	18 out of 244
Computer Engineering	29 out of 228
Electrical Engineering	28 out of 306
Mechanical Engineering	21 out of 327

**SDSU College of Engineering is ranked 25  
out of 423 in terms of number of BS degrees  
to URM**

# STUDENT SUCCESS & ENGAGEMENT

## ❖ New Advising Structure, launched fall 2021

➤ Aligns with SDSU Strategic Plan Priority #5, 'Students at Our Core'



For student appointments with all CSSE Advisors, login to <https://sdsu.campus.eab.com> with SDSU ID and password

For student appointments with Faculty Advisors, contact directly, see major department website

# STUDENT SUCCESS & ENGAGEMENT

## ❖ Peer Advisors

- Advising Tools
- Support Major Advisors
- Clubs and Organizations

## ❖ Major Advisors

- Course Planning
- Master Plans
- GE, Major Prep and Major
- Graduation Requirements

## ❖ Faculty Advisors

- Course Content
- Major/Professional Electives
- Post graduation plans
- Research

Date Range	Description	# of Student Visits to CSSE Advisors
8/23/21 to 9/10/21	Drop-in Advising Visits During Add/Drop Period	358
9/17/21 to 10/8/21	Master Plan Campaign Attendance (Major Advisors Only)	740

# STUDENT SUCCESS & ENGAGEMENT

## UPCOMING EVENTS



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SAN DIEGO STATE UNIVERSITY  
Center for Student  
Success in Engineering

### OCTOBER IS ENGINEERING ADVISING MONTH

Get ready to register for your Spring 2022 courses by learning about all the advising tools SDSU and the College of Engineering have available. Throughout the month of October 2021, the CSSE Peer Advisors will be hosting advising tool workshops. No RSVP needed; go to the Zoom link on the day that fits your schedule!

Advising Tool Workshops:

Wednesday, October 13, 10:30am - 12:00pm  
<https://sdsu.zoom.us/j/5319806975>

Tuesday, October 19, 10:30am - 12:00pm  
<https://sdsu.zoom.us/j/83637198123>

Wednesday, October 20, 10:30am - 12:00pm  
<https://sdsu.zoom.us/j/5319806975>

Thursday, October 21, 3:00pm - 4:30pm  
<https://sdsu.zoom.us/j/9313734638>

Tuesday, October 26, 10:30am - 12:00pm  
<https://sdsu.zoom.us/j/83637198123>



  
SAN DIEGO STATE UNIVERSITY  
Center for Student  
Success in Engineering

### Career Panel Series

College of Engineering

**Civil/Construction/Environmental:**  
October 15, 2021

**Mechanical:**  
November 19, 2021

**Electrical/Computer:**  
February 25, 2022

**Aerospace:**  
April 1, 2022

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*Join each of these panel events to hear from professionals  
in your major.  
Make valuable industry connections & gain insightful  
advice from local engineers.*

**Time: 12:30pm-1:30pm**  
**Place: Zoom**

↓  
<https://tinyurl.com/engpanelseries>



- Pumpkin Drop, 10/26 12-3pm, Student Union Courtyard
- Engr Club & Org. Fair, 10/13 11-2, Student Union Courtyard
- Research & Grad School Fair, 11/9 12-4, Scripps Cottage



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# COMMUNITY & COMMUNICATION

## • Connecting with Femineer® Teachers

- Continued to host Virtual Educator Collaboration seminars All 3 Femineer® curriculum have officially been UC A-G approved – The Femineer® Program can now be an elective during the class day
- Created a library of curriculum refresher videos on NEO Learning Management System for teachers

## • Femineer® Teacher Training

- SDSU hosted Fall 2021 Virtual Teacher Training in October. 20 middle & high school teachers were trained, across 4 states.
  - Creative Robotics: 12
  - Wearable Technology: 5
  - Pi Robotics: 3

### Affiliate University Partnership

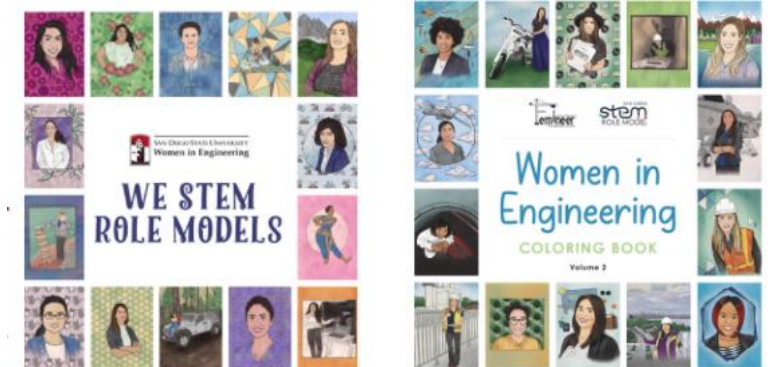
- Bi-monthly Zoom meetings with Cal Poly Pomona partners Launched Virtual Student Seminars through 2021-22 academic year
- Hosted 3 one-week Femineer® Summer Day Camps for middle & high school students with Creative Robotics & Wearable Technology implemented in the curriculum

## • Connecting with Femineer® & WE Students

- Twitter & Instagram (@Femineer\_SD and @SDSU\_WE)
  - Total of # Followers - Instagram: 312, Twitter: 315
- Posted past Femineer® Challenges & STEM Talks on SDSU Femineer® Program YouTube Channel
  - Over 1,095 views
- Created and distributed vol.1 (Spring 2021) & vol. 2 (Summer 2021) of the STEM Role Model Coloring Books
  - 1,500+ vol. 1
  - 2,000+ vol. 2
  - 3,500+ Total distributed coloring books

### WE Coffee Hours

- Hosted in-person Fall 2021 semester. An additional hour has been added based on student feedback





Nicole Hurtado-Savin, Civil Engineering senior, receives a CSU endowed scholarship and wants to help younger women break the gender and cultural stereotypes she has already started to overcome.

At SDSU, she credits two programs aimed at helping underrepresented minorities for providing critical support: CSU-LSAMP and the MESA (Mathematics, Engineering, Science Achievement) program.



## A collage of three images. The top left shows a young woman in a graduation cap and gown, looking up and smiling. The top right shows a student from behind, sitting at a desk and working on a computer. The bottom left shows a desk with a laptop, a notebook, and a pair of glasses.



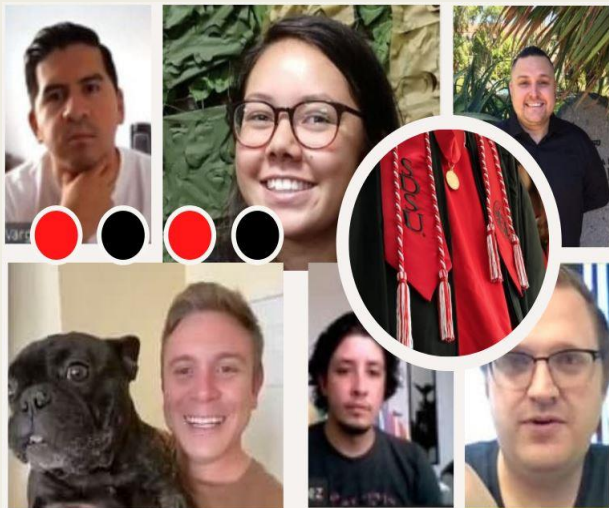


# TROOPS TO ENGINEERS



## Business as Usual: “Adapt and Overcome”

- Support with obtaining paid internship and jobs
- Continued community and industry partner engagement
- Compiling and consolidating University relevant resources for students - posted on program websites
- Implementing a variety of virtual tools to efficiently communicate with students (**Zoom, GoogleMeet, GroupMe, Youtube, Discord**, etc.)



## Fall 2021 Semester:

- In Process of hiring a Troops to Engineers Coordinator
- Planning for late Fall check-in with students
  - ◆ Monthly Lunch Hour Check-in
- Virtual professional development events
  - ◆ Business etiquette
  - ◆ Salary negotiations
  - ◆ Resume reviews
  - ◆ Mock interviews
- Emerging Engineer Identity Course – Pushed to Fall 2022
  - ◆ Designed to mitigate transitional barriers of student veterans navigating the physical and emotional challenges of simultaneously pursuing a degree and job searching.
  - ◆ Incorporate industry partners/SME's to continue to provide professional development and career readiness.
- Resume Book for prospective employers





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# UPDATE ON DEI COMMITTEE

# DEI COMMITTEE : FALL 2021 ACTIVITIES



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- **Coordinating with Department DEI Committees:**
  - Individual meetings with each Department Committee to ensure their success in establishing a Department DEI Plan
  - Reviewing Department DEI work on student success/performance data analysis and equity gaps by the College DEI committee
- **Focus on Goal#2: Increasing URM graduate students**
  - Launching “Grad Info Fair” for our undergraduates (and other STEM majors too) – 11/9/2021 at Scripps Cottage
  - Extensive interviews, presentations and visits to Native American reservations (Rencon, Soboba and Pala tribes) – education outreach plans and program developments in the pipeline
  - WE-Believe – summer 2021 research exposure program for our URM undergraduates for 3-weeks – PI Dr. Karen May-Newman

# FALL 2021 & SPRING 2022

## CoE IMPORTANT DATES TO REMEMBER



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### Fall 2021

- **October 29, 2021 (Fri)** – 10:30am-12:00pm – **Provost Visit to Engineering** – In person
- **November 5, 2021 (Fri)** – 8:30am-1:00pm – **Engineering Dean's Advisory Board Mtg** – Virtual
- **December 7, 2021 (Tue)** – 11:00am-12:00pm – **CoE Faculty Mtg** – Virtual
- **December 9, 2021 (Thu)** – 1:30pm-2:30pm – **CoE Staff Mtg** – Virtual

### Spring 22

- **May 5, 2022 (Thu)** – 1:00pm-4:00pm – **CoE Senior Design Day**– Montezuma Hall

# OTHER BUSINESS



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- ☐ Approval of 8/20/2021 CoE Faculty Retreat Minutes
- ☐ Other Business



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THANK YOU!