

# COLLEGE OF ENGINEERING

### FACULTY MEETING

APRIL 13, 2021





□ Call to Order ☐ Faculty Secretary present for minutes? □ Announcements & Updates ☐ Engineering Administration Updates **☐** Engineering Development Update > Kate Carinder - Senior Director of Development, CoE ☐ State of the College ☐ College Personnel and Infrastructure Update □ Building A Update ☐ Research & Graduate Program Update □ Undergraduate Program Update ☐ Community & Communication ☐ Update on DEI Council ☐ Update on Constitution & Bylaws ☐ Important Dates to Remember Other Business □ Approval of 2/16/21 CoE Faculty Meeting Minutes Adjournment



# ANNOUNCEMENTS & UPDATES

# **ENGINEERING ADMINISTRATION UPDATES**



# Congratulations! Effective July 1, 2021, both of the College of Engineering Associate Deans will no longer be Interim!



**Dr. Temesgen Garoma**Associate Dean for Graduate Studies & Research



**Dr. Yusuf Ozturk**Associate Dean for Undergraduate Studies

## **DEVELOPMENT UPDATE**



#### Development Goal FY20/21

- Goal \$6,000,000
- Raised to Date \$6,029,937

#### College Endowment

- Generous donor giving has allowed the College to double its endowment over the last two years
- 2020 \$22M and 44 endowed funds
- 2018 \$11.2M and 29 endowed funds

#### Cash Giving

 One donor provided \$500,000 in cash gifts to support Rocket Project, which enabled students the resources to complete their project and set a world record

#### 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





# **DEVELOPMENT UPDATE**



#### New Endowments since 2018

- Alfredo and Sandra Aldrete MESA Scholarship Endowment
- Dan and Ann Brown Research Support Endowment
- DN Tanks Scholarship Endowment
- Georgia Griffiths Scholarship Endowment
- fred harris Chair in Digital Signal Processing
- Chuck and Kathy Mendenhall Faculty Excellence Endowment
- Alex Mora MESA Scholarship Endowment
- Ellen Ochoa Femineer Endowment
- Rick Engineering Scholarship Endowment
- Paul Stuverud MESA Scholarship Endowment
- Andrew Szeto Endowment for Rehab/Assistive Technology

#### New AGC Chair Endowments since 2018

- Bergelectric
- Harper Construction
- Marathon Construction
- McCarthy Construction
- AGC SD

# **ENGINEERING ALUMNI RECOGNITIONS**



#### **Honorary Doctorates**

2020

Dr. Joseph E. Kiani, '85, '88

Honorary Doctor of Science

College of Engineering



2021

Dr. Stephen P. Doyle, '80 Honorary Doctor of Science College of Engineering



### **SDSU Distinguished Alumni**

College of Engineering, 2020

Mr. Roger Ball, '74

President, Rick Engineering Company





# STATE OF THE COLLEGE



# UPDATE ON COLLEGE PERSONNEL

# FACULTY SEARCHES FOR 2020 - 21



College of Engineering

**Unchilled Searches** 

Department	Position Area	Level	VPAA #
CCEE	Sustainable Infrastructure Engineering	Assistant	2020/21-17
CCEE	Coastal Engineering	Assistant	2020/21-72
CCEE	Structural Engineering	Assistant	2020/21-70
CCEE	Water Engineering	Assistant	2020/21-71
ME	Computational Mechanics	Assistant	2020/21-75
мЕ	Renewable Energy Conversion and Storage	Assistant	2020/21-74
Dean's Office	Assoc. Dean for Undergraduate Studies	Full	2020/21-58
Dean's Office	Assoc. Dean for Graduate Studies	Full	SDSU Internal

#### **New Open Position:**

AE	Aerodynamics	Assistant	2021/22-06

# TENURED/TENURE-TRACK FACULTY



	AE	CCEE	ECE	ME	CoE
Professors	7	5	8	8	28
<b>Associate Professors</b>	1	5	5	3	11
<b>Assistant Professors</b>	4	7	8	10	32
Fall 2019 T/T Faculty	12	17	21	21	71*
New Fall 2021 Positions	1	2	1	1	5
Total T/T Faculty*	13	19	22	22	<b>76*</b>

<sup>\*</sup> Includes participants in Faculty Early Retirement Program (FERP)



# UPDATE ON RENOVATION OF BUILDING A



BUILDING "A" RENOVATION



### PROGRESS PHOTOS (WEEK OF 02/09/21)



AIR CONDITIONING
THROUGHOUT BUILDING



**UPGRADED POWER** 



HIGH CEILINGS, FIRE SPRINKLERS



### **BUILDING INTERIORS (WEEK OF 04/05/21)**

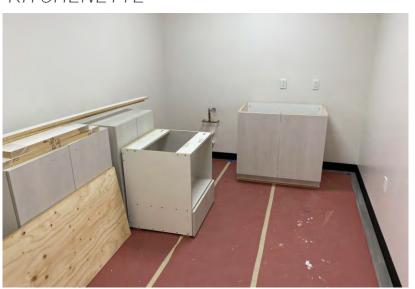


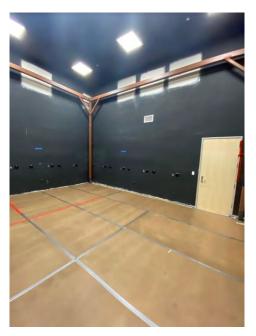
INTERIOR PALETTE

INTERIOR HALL

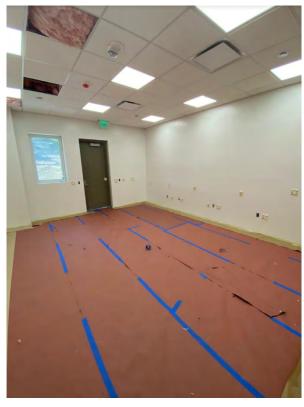


FACULTY KITCHENETTE





DRONE FLIGHT LAB



TYPICAL LAB

#### **BUILDING FEATURES (WEEK OF 04/05/21)**

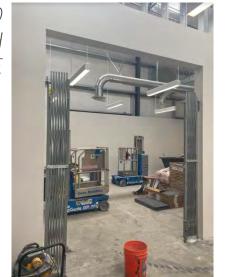
College of Engineering





INFRASTRUCTURE AND MEZZANINES FOR EQUIPMENT: FUME HOODS, SNORKELS, SINKS, COMPRESSED AIR, VACUUM

AIR CONDITIONED SHOP SPACES WITH LOCKOFF GATE





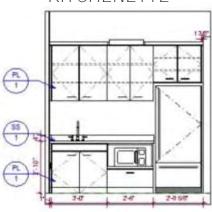
IMPROVED ENTRANCES (SIGNAGE GRAPHICS IN PRODUCTION)







FACULTY KITCHENETTE



ACOUSTIC WALLS SURROUND SHOP SPACES



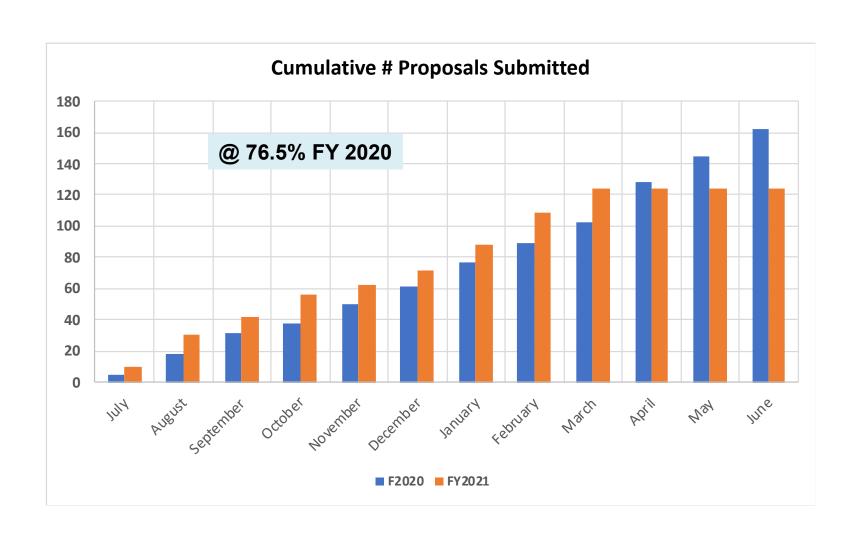




# RESEARCH & GRADUATE PROGRAM UPDATE

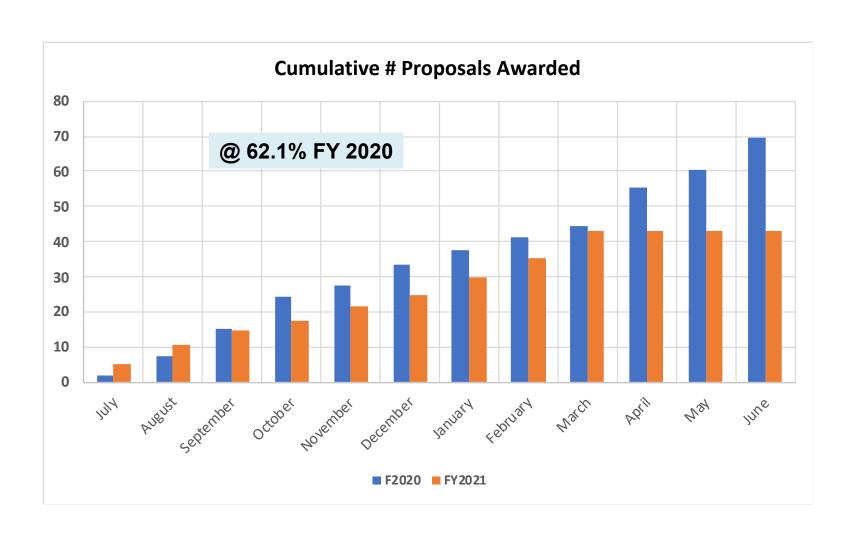
# PROPOSAL SUBMISSIONS





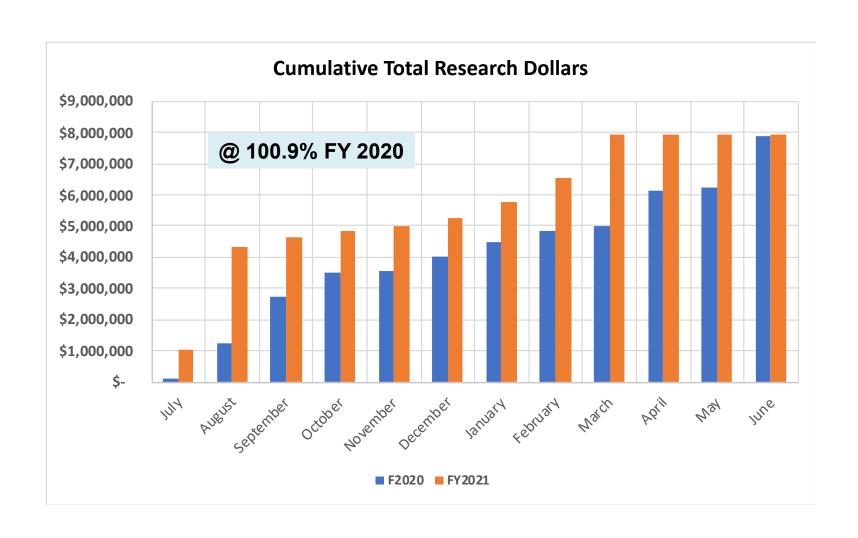
# PROPOSAL AWARDS





# RESEARCH DOLLARS





# **NSF CAREER AWARDS**



- 1. Dr, Junfei Xie, CAREER: Towards Networked Airborne Computing in Uncertain Airspace: A Control and Networking Facilitated Distributed Computing Framework, **2021**, \$550,000
- 2. Dr. Sungyong Park, CAREER: Optofluidic Solar Indoor Lighting Towards Sustainable Buildings, **2021**, \$500,000
- 3. Dr. Reza Akhavian, CAREER: Co-Adaptation and Trust in Worker-Robot Interactions: Scalable Adoption of Collaborative Robots in Construction, **2021**, \$691,328

# TTO DATA FOR COLLEGE OF ENGINEERING

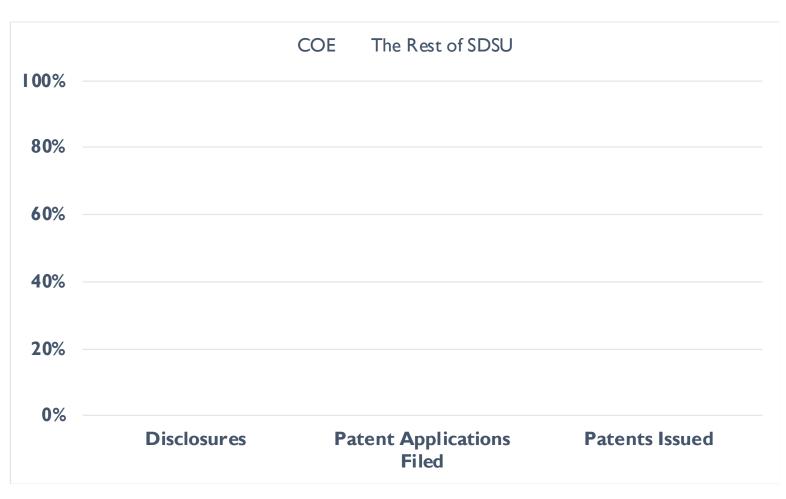




<sup>\*</sup> FY 2021 data is through March 9, 2021

# TTO DATA FOR COLLEGE OF ENGINEERING FY 2017-2021\*





<sup>\*</sup> FY 2021 data is through March 9, 2021

# COE FACULTY SCHOLARLY ACTIVITY



- Current data on faculty scholarly activity is essential
  - Recognizing faculty for their efforts
  - Requesting resources for the College
  - Positioning the College for opportunities
  - Promoting the College with potential donors

- Annual faculty activity report ?
  - Data is limited and may not capture everything
  - Delay in reporting
- One option being considered is Google Forms
  - Can be comprehensive
  - User friendly, mostly require inputting numerical data
- We are open to feedbacks and suggestions

# DRAFT GOOGLE FORM





First name	
Your answer	
Last name	
Your answer	
Department	
Choose	
Rank	
Choose	

# DRAFT GOOGLE FORM



Publications (published only)	
Please answer the following questions about your published publications is submitted, accepted, or in press will be collected in the next section.	n 2020. Data on publications
Number of refereed journal articles	
Your answer	
Number of refereed proceedings	
Your answer	
Number of books	
Your answer	
Number of refereed book chapters	
Your answer	
Number of non-refereed journal articles	
Your answer	
Number of non-refereed book chapters	
Your answer	
Number of non-refereed proceedings	
Youranswer	

Publications submitted, accepted, or in press	
Please answer the following questions about your publications (books, j hat are submitted, accepted, or in press.	ournal articles, and proceedings)
Number of publications submitted for review	
Your answer	
Number of publications accepted	
Your answer	
Number of publications in press	
Your answer	

rease provide infor	nation on your other schola	arly activities in 2020.	
Number of inv	ted talks		
Your answer			
Number times	served as panel chair	rs	
Your answer			
Number of loc organized	al, national, or interna	tional conferences	organized or co-

# DRAFT GOOGLE FORM



Stud	ent Supervision
Num	ber of PhD students currently under your supervision
Your	answer
Num	ber of master's students currently under your supervision
Your	answer
Num	ber of undergraduate students currently under your supervision
Your	answer
Num	ber of PhD students supported from state fund or grants
Your	answer
Num	ber of master's students supported from state fund or grants
Volir	answer

Number of u	ndergraduate students supported from state fund or grants
Your answer	
Number of P	hD students graduated from your group in 2019/20 academic yea
Your answer	
Number of n academic ye	naster's Thesis students graduated from your group in 2019/20 ar
Your answer	
Number of n	naster's Project students graduated from your group in 2019/20 ar
Your answer	

Patent	S
How m	nany provisional patent applications did you submit at SDSU?
Your an	swer
	nany provisional patent applications did you submit at your previous tion(s)?
Your an	swer
How m	nany full patent applications did you submit at your previous institution(s)?
Your an	swer
How m	nany full patent applications did you submit at SDSU?
Your an	swer
How m	nany patents have you been granted at SDSU or previous institution(s)?
Your an	swer
How m	nany of your patents are commercialized?
Your an	swer

# JDP FALL 2021 APPLICATIONS



- 102 applications were submitted
- The JDP Steering Committee held six review rounds
  - A total of 69 applications were reviewed
  - 34 applicants recommend for admissions and were asked to submit their applications to UCSD Departments
  - 25 applicants were NOT recommended for admissions
- Seven applications were recommended for admissions by UCSD MAE Department
- We are still waiting to receive response from UCSD Departments on the rest of the applications

# JDP REVIEW AND MOU



- UCSD Grad Council recommended continuation of the program
- Administrative Wrap-Up Review Meeting is scheduled for May 3, 2021
- MOU and Bylaws Update
  - Had several meetings
  - Same degree and GPA requirements JDP and UCSD doctoral students
  - The \$5,500 UCSD fee will be discussed in the next meeting

# **UGF AND PRGF**



- Six nominations were submitted for PRGF
- 13 nominations were submitted for UGF

# NEW CA RESIDENT MASTER'S SEEKING



	Applications		Admits			Intents to Enroll	
Master's Programs	F 2020	F 2021	F 2020	F 2021	F21 Target	F 2020	F 2021
AE	25	40	9	10	35	1	0
ВІО	15	21	10	6	15	0	0
CIVE	27	43	9	6	30	2	0
ECE	42	32	29	19	40	6	2
ENVE	2	19	2	2	6	0	0
Master Engineering	0	15	0	5	6	0	1
ME	28	57	5	12	30	0	2
TOTAL	139	227	64	60	162	9	5

F 2020 counts are: From 10/01/2019 to 03/27/2020 F 2021 counts are: From 10/01/2020 to 03/26/2021

### NEW NON-RESIDENT & INTERNATIONAL MASTER'S SEEKING



	Applic	ations		Admits			Intents to Enroll	
Master's Programs	F 2020	F 2021	F 2020	F 2021	F21 Target	F 2020	F 2021	
AE	17	20	7	4	15	0	1	
ВІО	13	12	4	2	10	1	0	
CIVE	34	44	6	1	20	1	1	
ECE	116	122	60	31	80	3	10	
ENVE	2	8	2	0	6	0	0	
Master Engineering	8	12	0	0	4	0	0	
ME	34	40	8	10	20	0	1	
TOTAL	224	258	87	48	155	5	13	

F 2020 counts are: From 10/01/2019 to 03/27/2020 F 2021 counts are: From 10/01/2020 to 03/26/2021



# UNDERGRADUATE PROGRAM UPDATE

# **ABET PREPARATIONS**



- ABET visit will be virtual in 2021-2022 cycle.
- Second draft of the ABET Self Study Document is completed on April 1<sup>st</sup>.
- Final version of the ABET Documents is due in Dean's office on May 1<sup>st</sup>.
- July 1<sup>st</sup>: Self study documents will be submitted to ABET
- July 2021: Meeting with the ABET Visit Team Leader
- August 2021: Upload all Virtual Visit Review Materials on Google Drive.

# **ABET PREPARATIONS**



- The Visit most likely spread over a longer period. The Laboratory and Classroom visits will be completed before the ABET virtual visit days.
- We will need to prepare a 10-minute video of each laboratory used for instruction. We have 19 laboratories used for instructional purposes.
- Department Chairs will contact faculty teaching laboratory courses and courses that have a lab component for narratives for lab introductions.

# UNDERGRADUATE PROGRAMS - ADVISING



- We deployed EAB software and launched proactive advising.
  - Freshman and Sophomores in pre-major status are advised by peer mentors.
  - Juniors and Seniors are assigned to faculty advisors.
  - All faculty have access to EAB: <a href="http://sdsu.campus.eab.com/">http://sdsu.campus.eab.com/</a>
- Students who are at risk are receiving alerts from Dean's office to visit their major advisors.
- Please meet with your advisees and keep a record of the advising session on EAB. This is critical for ABET visit. Faculty contact point is Dr. Yusuf Ozturk.

### FALL 2021 WILL BE PREDOMINANTLY IN-PERSON

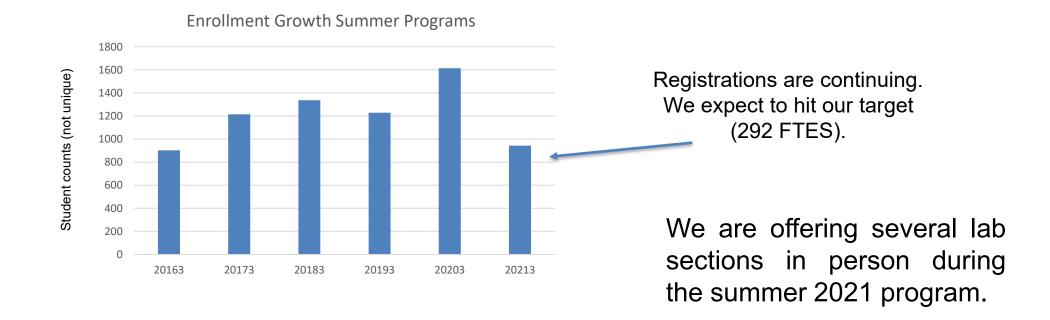


- Governor Announcement
- Full time in-person instruction
- Requirements in Fall Semester
  - Testing if not vaccinated
  - Vaccinations
  - Masks
- Proof of vaccination or frequency of testing is being explored for students
- No capacity limitation, no distance limitations
- Schedule: Fall 2021 schedule will be released on May 10
- TENTS are no longer considered

# SUMMER 2021 SCHEDULE



 We are offering 44 courses in the Summer 2021 semester (Offered 40 courses in 2020, 35 courses in 2019)



# UPDATE: Spring 2021 & Fall 2021 Plans



### Remaining spring 2021 Rest and Recovery Day:

Thursday, April 15: Rest and recovery day

Due to recent state and local changes to less restrictive guidelines (as of 4/7/21):

- Fall classes will return to mostly in-person (exceptions considered as needed by faculty or students); vaccines or COVID results may be required
- Fall schedule will be available online beginning May 10, 2021
- Fall registration information will be in students' WebPortal on May 10
- Fall registration will begin May 25

AND REGISTRATION

#### **Important and Helpful Resources**

- SDSU COVID-19 Surveillance Testing Plan <a href="https://bit.ly/33Di9f8">https://bit.ly/33Di9f8</a>
- Provost/President Announcements
- SDSU Flex <a href="https://www.sdsu.edu/flex/faqs">https://www.sdsu.edu/flex/faqs</a>
- SDSU COVID Updates <a href="https://sacd.sdsu.edu/student-health-services/covid-19/">https://sacd.sdsu.edu/student-health-services/covid-19/</a>

# STUDENT SUCCESS & ENGAGEMENT





- CSSE services continue remotely throughout spring
- Peer advising information and appointments, csse.sdsu.edu
- Drop-In tutoring continues until May 6th (last day of spring 2021 instruction)



#### **Courses Offered:**

AE 200, 220, 280, 340 ME 200, 220, 304, 350, 360 **CHEM 200, 202** MATH 150,151 PHYS 195, 196 COMPE 160, 470, 475 **EE 300** 



- All activities are virtual
- With changing guidelines surrounding pandemic, one inperson event has been allowed on campus for spring
- Clubs are anxious to return to full in person activities







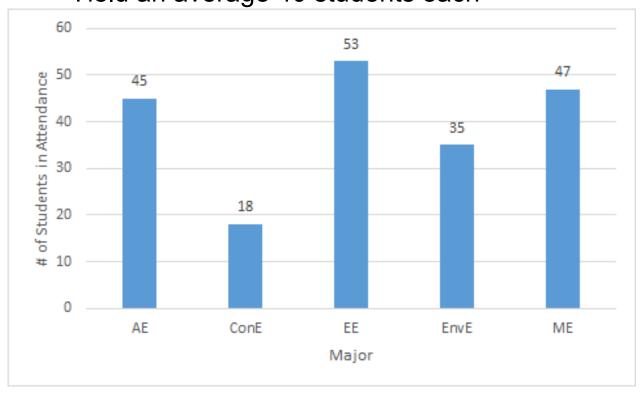
# STUDENT SUCCESS & ENGAGEMENT (CONT...)

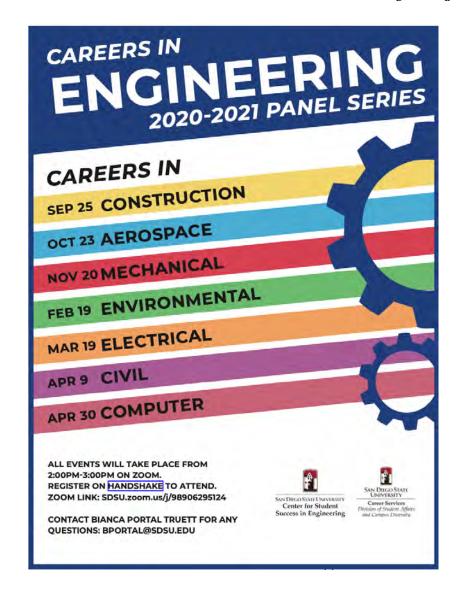


College of Engineering

#### **Career Panels**

- Remaining for spring 2021
  - Civil, 4/9
  - Computer, April 30
- Yield an average 40 students each





### SPRING 2021 PRO-ACTIVE ADVISING APPROACH



### SDSU Navigate (EAB) - <a href="https://studentsuccess.sdsu.edu/navigate-sdsu">https://studentsuccess.sdsu.edu/navigate-sdsu</a>

- Campus wide utilization by fall 2021
- CoE Spring 2021 Pilot
  - Aligns with SDSU Strategic Plan and with GI 2025 goals
  - Purpose: connect students to advisors (pre-major and major)
  - Launched Appointment Campaigns to targeted students
- More information provided at Provost's Advising Forum on April 16th, contact Christine Molina, <a href="mailto:cvidena@sdsu.edu">cvidena@sdsu.edu</a> to RSVP





# **COMMUNITY & COMMUNICATION**





### FEMINEER® & WOMEN IN ENGINEERING



#### College of Engineering

#### Connecting with Femineer® Teachers

- Hosted Virtual Educator Collaboration seminars
- In process of getting all 3 Femineer® curriculum UC A-G approved
- Created program content and updated NEO Learning Management System



- Bi-monthly Zoom meetings with Cal Poly Pomona partners
- Planned virtual opportunities for schools nationwide
- Virtual Femineer® Summit May 12, 2021
  - Multiple Sponsorships and Donations
  - Part of Remake Learning Days
- Planning/co-hosting Femineer® Summer Camps

#### Connecting with Femineer® & WE Students

- Twitter & Instagram (@Femineer SD and @SDSU WE)
  - Total of # Followers Instagram: 239, Twitter: 278
- Posted past Femineer® Challenges & STEM Talks on SDSU Femineer® Program YouTube Channel
  - Over 1,095 views
- WE Coffee Hours
  - Hosting 3 virtually during Spring 2021
  - Engaged ~15-20 participants each Coffee Hour
- WE Chat
  - Hosted 1 virtually via Zoom during Spring 2021
  - Engaged ~20-35 participants each WE Chat
  - Speaker included: 1 local engineer









#### STEM Talk Day with Industry

Hosting 3 Zoom webinars for Spring 2021 featuring





MOTOROLA SOLUTIONS NAV AIR



- Engaging 100+
- E-Week Events

AS OF 3/30/2021:

- Led workshop during San Diego STEM Ecosystem's Role Model Training
- Created 2 videos Introduce a Girl to an Engineer and Introduce a Girl to an Engineering Student
- STEM Talk with Industry featuring Northrop Grumman
- WE Coloring Book Volume 1





Natasha Celise, Director, University Program Luis Topete, Director, San Diego College Prep Program Jeanette Ramos, Director, Imperial Valley College Prep Program

#### **UNIVERSITY SEGMENT ENGAGEMENT**

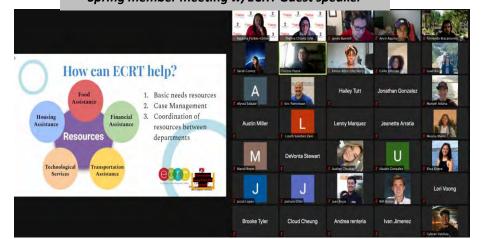








#### Spring member meeting w/ECRT Guest speaker



#### **COLLEGE PREP SEGMENT ENGAGEMENT**

#### Virtual & In-Person:

- Recycle My Ride (STEM Challenge)
  - \*Build a vehicle entirely out of recyclable materials\*
- MESA Day Preliminary & Regional Competitions
  - Preliminary March 2021
  - Regional (Irvine, Riverside, San Diego, Imperial Valley) – April 2021
- Coding Workshops & Hands-On Projects
- Life Skills Workshops (Resume/Interview)
- Industry/Undergraduate School Virtual Visits









# 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.)



#### **Spring 2021 Semester Wrap up:**

"Home stretch"

- → Check-in with students
  - ◆ Monthly Lunch Hour Check-in
  - ◆ 20 students projected to graduate in Spring/Summer
- → 7 virtual professional development events
  - Welcome Back Mixer Engineering Panel
  - Professional Development Tips and Tricks with Northrop Grumman
  - ◆ BAE Systems Information Session
  - Boeing Information Session
  - ◆ Lockheed Martin Information Session
  - ◆ Booz Allen Hamilton Information Session
  - ◆ 1x1 Mock interviews and Resume Reviews
- → Emerging Engineer Identity Course launches Fall 2021
  - ◆ Designed to mitigating transitional barriers of student veterans by exploring the development of their new emerging engineer identity and 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.

### WED 5/5 VIRTUAL ENGINEERING DESIGN DAY

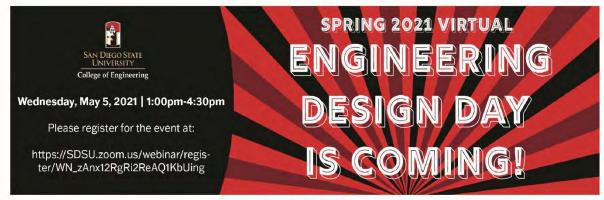








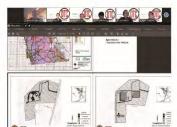












#### **Virtual Engineering Design Day**

Wednesday, May 5, 2021 1:00pm-4:30pm Zoom Webinar Link: https://SDSU.zoom.us/s/83277265234

- 1:00pm-1:15pm General Session Webinar
  - > Remarks from President de la Torre
  - Overview of Design Day by Dean Olevsky
- 1:15pm-4:30pm Student Project Zoom Visits
  After General Session Webinar participants will be able to visit individual student project Zoom links to interact with students.

Each Department will have their own Design Day web page for their student projects and will include:

- > Picture of Project
- ➤ 5-min YouTube Video of Student Project
- > PDF of Project Poster
- > Zoom Link



# UPDATE ON DEI COMMITTEE

# DEI COMMITTEE: SPRING 2021 ACTIVITIES



#### Coordinating with Department DEI Committees:

 Individual meetings with each Department Committee to ensure their success in establishing a Department DEI Plan

#### Focus on Goal#2: Increasing URM graduate students:

- Meetings and Seminars with NSBE (African American), SHPE (Latinx) and General body Student Council – data gathering straight from students – what are their major roadblocks to attending graduate school
- Meeting with Associate Dean, Assistant Dean, AVP for Research Advancement, PI of MERK program – what could be potential strategies, strategies that have worked or haven't worked
- Committee brainstorming on programs that can be launched in the College

#### Resources, Resources:

 Tentative budget (of \$85K) to implement DEI strategies for the College was submitted to University DDI Council



# UPDATE ON COE CONSTITUTION & BYLAWS

### CONSTITUTION AND BYLAWS



College of Engineering

#### 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

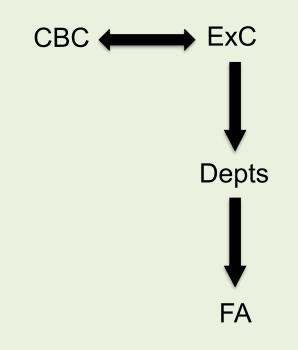
**APPENDIX B. RTP Criteria** 

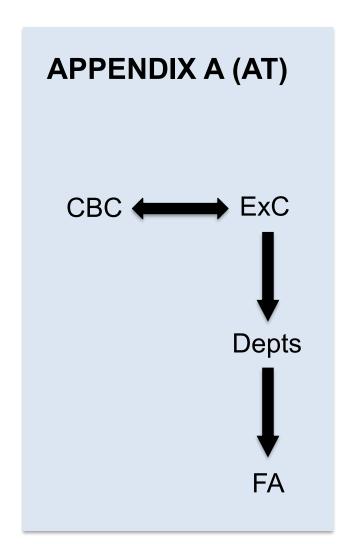
# CONSTITUTION AND BYLAWS

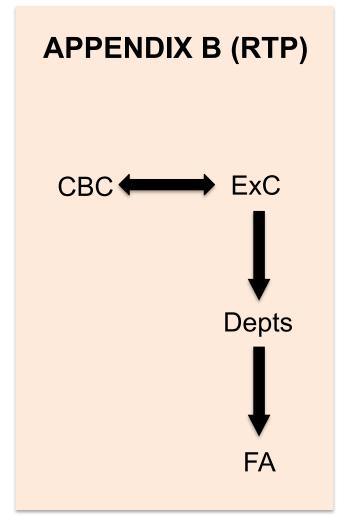


College of Engineering









# SPRING 2021& FALL 2021 COE IMPORTANT DATES TO REMEMBER



### Spring 2021

- April 14, 2021 (Wed) 1:30pm-2:30pm CoE Staff Mtg via Zoom
- April 17, 2021 (Sat) 10:00am-12:00pm Explore SDSU Day 2 (Out of Classroom Focus) via Zoom
- May 5, 2021 (Wed) 9:00am-12:00pm Engineering Dean's Advisory Board Mtg via Zoom
- May 5, 2021 (Wed) -1:00pm-4:30pm- Spring 2021 Engineering Design Day via Zoom
- May 26, 2021 (Wed) 1:00pm Engineering Commencement Virtual and In-person at Petco Park

#### Fall 2021

August 20, 2021 (Fri) – 1:00pm-4:00pm – CoE Fall 2021 Retreat – Format to be determined

# OTHER BUSINESS



☐ Approval of 2/16/2021 CoE Faculty Meeting Minutes

☐ Other Business



# THANK YOU!