



SAN DIEGO STATE
UNIVERSITY

COLLEGE OF ENGINEERING

STAFF MEETING

DECEMBER 5, 2019

AGENDA



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- ☐ Call to Order

- ☐ Announcements & Updates
 - ☐ Engineering Development Update
 - Kate Carinder – Senior Director of Development, CoE
 - ☐ Engineering Staff Update
 - ☐ Update on Faculty Searches

- ☐ State of the College
 - ☐ Research & Graduate Program Update
 - ☐ Undergraduate Program Update
 - ☐ Important Dates to Remember

- ☐ Other Business
 - ☐ Round Table

- ☐ Adjournment



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ANNOUNCEMENTS & UPDATES

DEVELOPMENT UPDATE



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A couple of recent gifts:

- Paul Stuverud – Endowment for MESA Scholarship
- Dr. Szeto – Endowment for ECE lab support



How you can help us, help you...successful former students, retired faculty, friends of the College.

Contact us: Kate, kcarinder@sdsu.edu and Missy, mstump@sdsu.edu

ENGINEERING STAFF UPDATES



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Frances Wolven

B.A., History, San Diego State University

Position:

Administrative Support Coordinator for Civil, Construction &
Environmental Engineering

FACULTY SEARCHES FOR 2020 - 21



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Department	Position Area	Level	VPAA #
AE	Aerospace Engineering Design	Assistant	2020/21-18
CCEE	Sustainable Infrastructure Engineering	Assistant	2020/21-17
ECE	Digital Signal Processing	Assistant	2020/21-15
ME	Robotics & Control	Assistant	2020/21-16
Dean's Office	Assoc. Dean for Undergraduate Studies	Full	2020/21-58
Dean's Office	Assoc. Dean for Graduate Studies	Full	SDSU Internal

Six additional faculty positions!



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STATE OF THE COLLEGE



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RESEARCH & GRADUATE PROGRAM UPDATE

RESEARCH AWARDS TO ENGINEERING PIs



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Proposals Submitted by Engineering Faculty

	01/01/2018 to 12/30/2018		01/01/2019 to 11/30/2019*		Total Number of Proposals
Dept.	Total Number of Proposals Submitted	Number of PIs with Proposals	Total Number of Proposals Submitted	Number of PIs with Proposals	Change (%)
AE	21.33	6	21.67	7	1.6
CCEE	28.53	14	19.00	11	-33.4
ECE	38.1	16	36.81	17	-3.4
ME	44.6	16	39.10	16	-12.3
TOTAL	132.56	52	116.58	51	-12.1

* YTD

RESEARCH AWARDS TO ENGINEERING PIs



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Total Dollars Awarded to Engineering Faculty

	01/01/2018 to 12/31/2018			01/01/2019 to 11/30/2019*			Total Dollars Awarded
Dept.	Total Dollars Awarded	Total Number of Awards	Number of PIs with Awards	Total Dollars Awarded	Total Number of Awards	Number of PIs with Awards	Change (%)
AE	\$557,099	7	5	\$956,292	14.34	6	71.6
CCEE	\$1,386,730	12.67	8	\$813,463	11	8	-41.3
ECE	\$1,333,330	17.00	8	\$1,923,603	15	10	42.3
ME	\$3,067,004	23.40	12	\$3,125,141	23.25	13	1.9
TOTAL	\$6,344,163	60.07	33	\$6,818,499	63.59	37	7.5

* YTD

RESEARCH AWARDS TO ENGINEERING PIs



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Proposals Submitted by Engineering Faculty

	01/01/2019 to 11/30/2019*		
Hire Date Ranges	Total Number of Proposals Submitted	Number of PIs with Proposals	Proposals Submitted / TT
Less than 5 Years	57.01	21	2.7
5 to 10 Years	16.00	8	2.0
10 to 20 Years	27.69	16	1.7
Greater than 20 Years	14.38	6	2.4
TOTAL	115.08	51	2.3

* YTD

RESEARCH AWARDS TO ENGINEERING PIs



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Proposals Awarded to Engineering Faculty

	01/01/2019 to 11/30/2019*			
Hire Date Ranges	Total Dollars Awarded	Total Number of Awards	Number of PIs with Awards	Dollars Awarded / TT
Less than 5 Years	\$3,068,497	28	15	\$204,566
5 to 10 Years	\$668,767	9	6	\$111,461
10 to 20 Years	\$2,729,664	18.59	13	\$209,974
Greater than 20 Years	\$531,571	9	6	\$88,595
TOTAL	\$6,998,499	64.59	40	\$174,962

* YTD

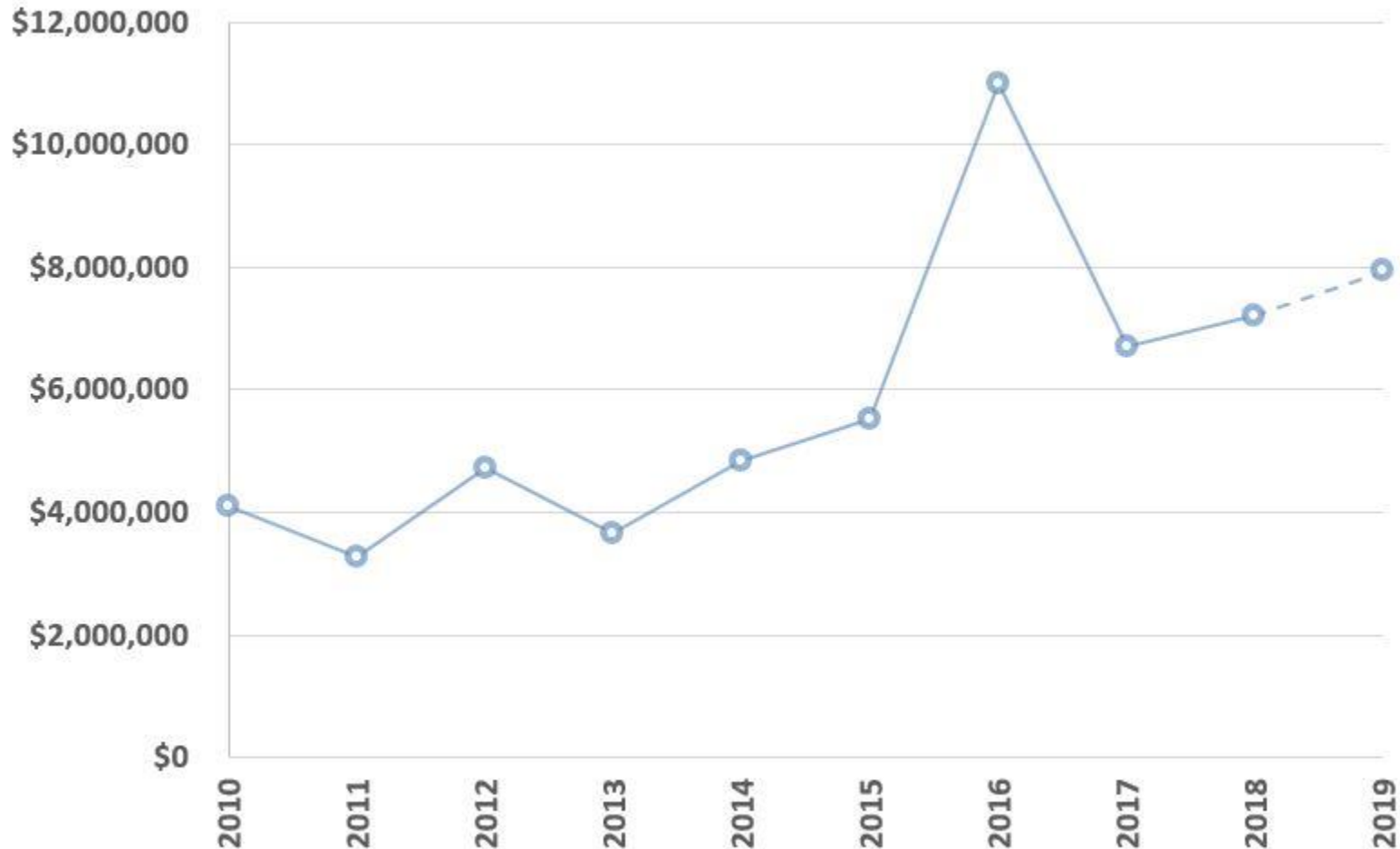
RESEARCH AWARDS TO ENGINEERING FACULTY



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Total Dollars Awarded to Engineering Faculty CY 2010 to 2019



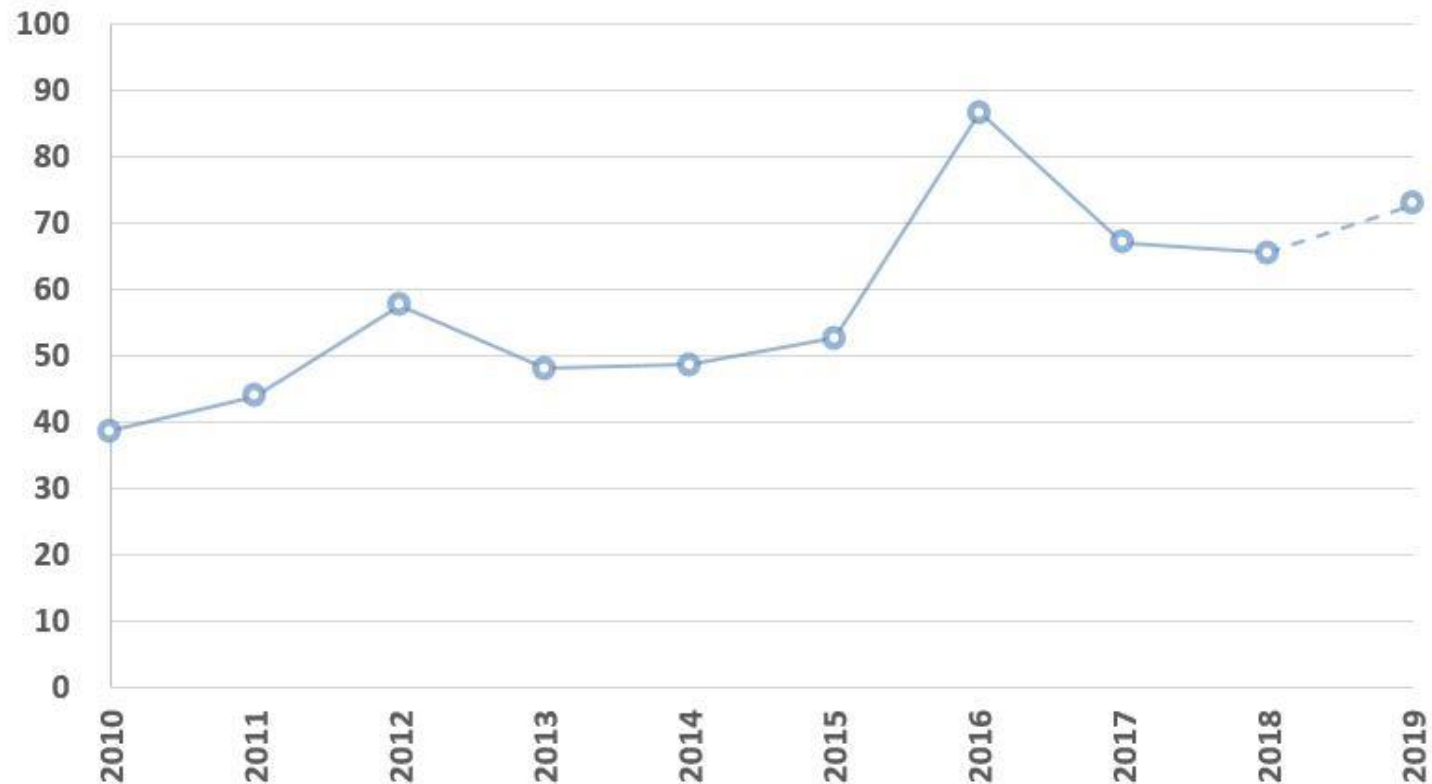
RESEARCH AWARDS TO ENGINEERING FACULTY



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Total Number of Proposals Awarded to Engineering Faculty CY 2010 to 2019





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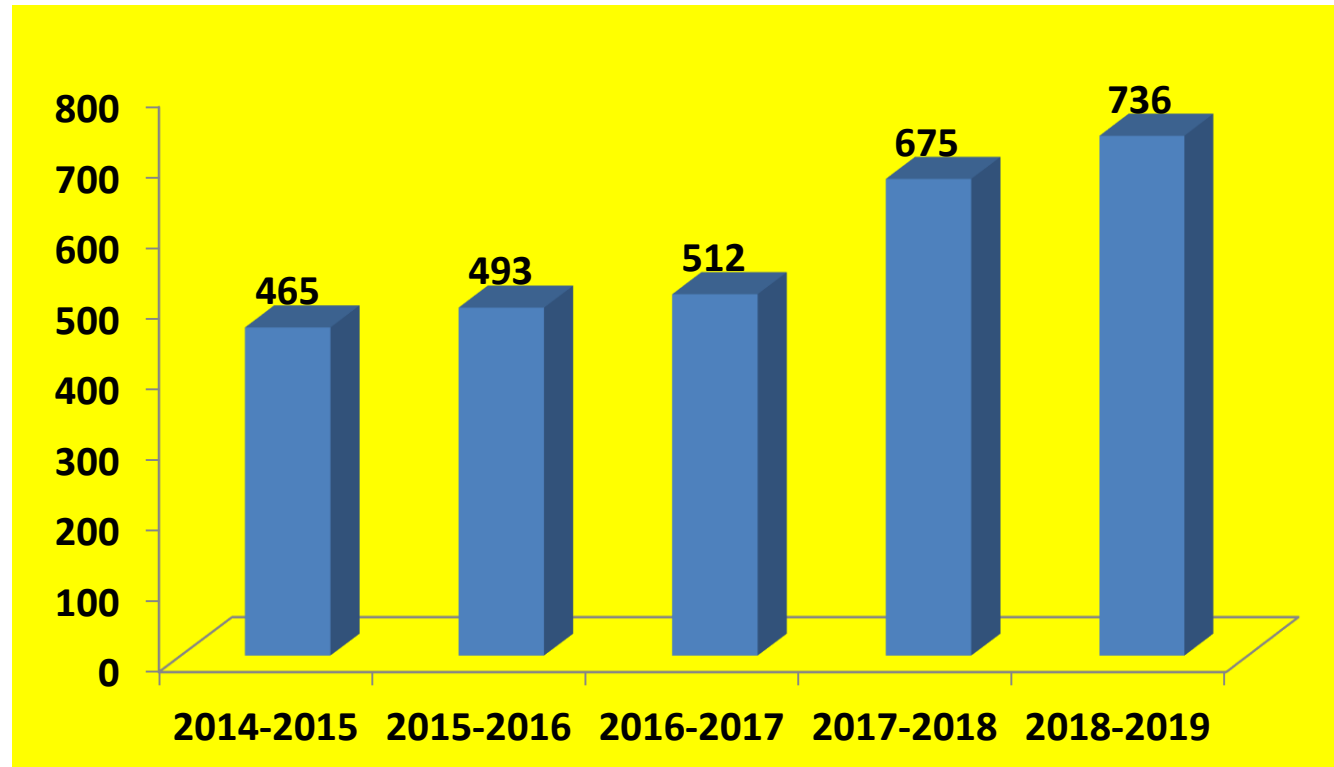
UNDERGRADUATE PROGRAM UPDATE

SDSU ENGINEERING BACHELOR DEGREES CONFERRED



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CoE Program	National Ranking: Workforce
Civil Engineering	24 out of 194
Electrical Engineering	25 out of 277
Mechanical Engineering	18 out of 278

COLLEGE OF ENGINEERING STUDENT-TO-FACULTY RATIO



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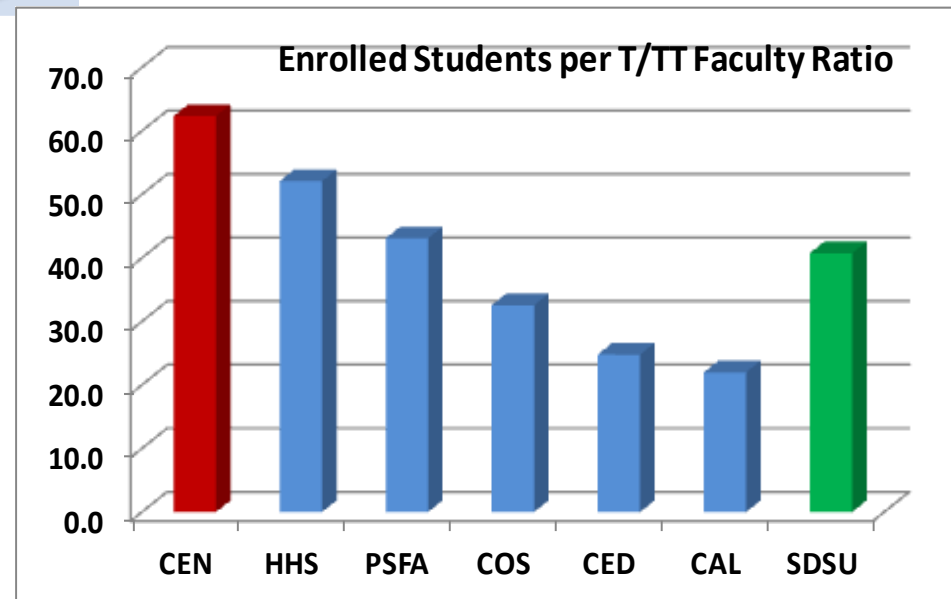
College of Engineering

No	Universities	No
1	California State University, Long Beach	12.1
2	California State Poly. University, Pomona	11.8
3	California State University, Sacramento	11.6
4	San Diego State University	11.4
7	San Jose State University	10.3
9	California State University, Fullerton	9.6
10	California State University, Northridge	9.5
11	California Poly. State University, SLO	9.4
20	University of California-Santa Cruz	7.7

← Graduated Students per T/TT Faculty

A new report from the San Diego Workforce Partnership identified 54 jobs in the County that are projected to grow the most over the next five years (San Diego Union Tribune, March 28, 2019). The top six jobs expected to grow the most in San Diego County are:

- 1. Electrical engineers. Requirement: Bachelor's degree**
2. Clinical laboratory technologies. Requirement: Associate's degree
3. Physical therapist assistants. Requirement: Associate's degree
- 4. Mechanical engineers. Requirement: Bachelor's degree**
5. Physician assistants. Requirement: Master's degree
6. Reinforcing iron and rebar workers. Requirement: High school diploma or equivalent



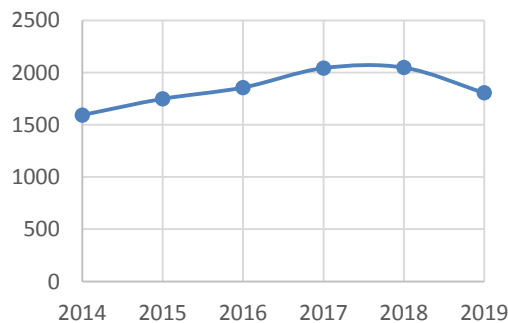
ENROLLMENT TRENDS BY MAJOR (FALL SEMESTER) (FTES)



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Year	Aerospace	Civil	COMPE	Construction	Electrical	Engineering	Environmental	Mechanical	Grand Total
2014	225.5	191.3	143	100.3	329.5	12.2	50.9	540.7	1593.4
2015	220.6	243.5	155.9	98.6	352.9	13.7	63.6	599.4	1748.2
2016	248.6	244	206.1	100.5	338.1	13.1	68	638.3	1856.7
2017	304.2	257.4	217.8	82.7	389.3	16.3	67.9	706.6	2042.2
2018	304.7	286.6	202	90.9	356.4	21.1	82.1	703.3	2047.1
2019	282.3	267.5	179.5	73.8	303.0	8.9	69.7	664.8	1850



There is a decline in engineering student counts due to the changes in admission process and increase in Summer Program. All majors are effected with Construction and Electrical Engineering leading with 22% and 18% decline respectively.



TOTAL UNIT REDUCTION: OUR STRATEGY

- At the present time, 48 total GE units are required for graduation at SDSU. These come from:
- *Area A: Core Competencies (9 units)*
 - A.1 (Oral Comm), A.2 (Written Comm), A.3 (Critical Thinking)
- *Area B: Scientific Inquiry and Quantitative Reasoning (12 units)*
 - B.1 (Phys Sci), B.2 (Life Sci), B.3 (Lab) , B.4 (math/quant reasons)
- *Area C: Arts and Humanities (12 units)*
- *Area D: Social Sciences (15 units)*
 - Social Sciences (9 units)
 - Explorations (3 Units)
- *Area E: Lifelong Learning and Self Development (3 units)*
- *Area Z: Cultural Diversity (0-3 Units)*



AREA A.3 : CRITICAL THINKING

- Critical thinking is the intellectually disciplined process of actively and skillfully conceptualizing, applying, analyzing, synthesizing, and/or evaluating information gathered from, or generated by, observation, experience, reflection, reasoning, or communication, as a guide to belief and action.
- Engineering majors score high in national tests of critical thinking because this essential professional skill is taught and assessed through a variety of Engineering courses.
- The College is requesting that its majors be allowed to meet the GE Critical Thinking requirement as part of its major completing a relevant engineering course(s), rather than by completing a course in GE Area A.3.

RSVP BY END OF DAY FRI 12/6



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COLLEGE OF ENGINEERING ANNUAL HOLIDAY LUNCHEON

TUESDAY, DECEMBER 10, 2019
11:30AM-1:00PM

THE GARDEN – CUICACALLI SUITES



FALL 2019

CoE IMPORTANT DATES TO REMEMBER



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- **Dec 9, 2019 (Mon)** – 2:00pm-4:00pm – **JDP Research Symposium** – Parma Payne
Goodall Alumni Center
- **Dec 10, 2019 (Tue)** – 11:30am-1:00pm – **CoE Holiday Luncheon** – Cuicacalli Suites,
The Garden

SPRING 2020

CoE IMPORTANT DATES TO REMEMBER



- **Feb 11, 2020 (Tue)** – 11:00am-12:00pm – **CoE Faculty Mtg** – Bioscience Center, Gold Auditorium
- **Feb 13, 2020 (Thu)** – 1:30pm-2:30pm – **CoE Staff Mtg** – Engineering Dean's Conf. Room
- **Apr 21, 2020 (Tue)** – 11:00am-12:00pm – **CoE Faculty Mtg** – Bioscience Center, Gold Auditorium
- **Apr 23, 2020 (Thu)** – 1:30pm-2:30pm – **CoE Staff Mtg** – Engineering Dean's Conf. Room
- **May 6, 2020 (Wed)** – 8:30am-1:00pm – **Engineering Dean's Advisory Board Mtg** – Templo Mayor Conf. Room, Aztec Student Union
- **May 6, 2020 (Wed)** – 1:30pm-4:00pm – **2020 Engineering Design Day** – Montezuma Hall

OTHER BUSINESS



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- ☐ Round Table
- ☐ Other Business?



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THANK YOU!