



SAN DIEGO STATE  
UNIVERSITY

COLLEGE OF ENGINEERING

FACULTY MEETING

DECEMBER 3, 2019

# AGENDA



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- ☐ **Call to Order**
  - ☐ **Faculty Secretary present for minutes?**
- ☐ **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**
  - ☐ **Approval of 10/8/2019 CoE Faculty Mtg. Minutes**
  - ☐ **SDSU Technology Transfer Office Services**  
**Kyle Welch, Licensing Manager**
- ☐ **Adjournment**



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# ANNOUNCEMENTS & UPDATES

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# 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](mailto:kcarinder@sdsu.edu) and Missy, [mstump@sdsu.edu](mailto: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

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# 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
<b>TOTAL</b>	<b>132.56</b>	<b>52</b>	<b>116.58</b>	<b>51</b>	<b>-12.1</b>

\* 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
<b>TOTAL</b>	<b>\$6,344,163</b>	<b>60.07</b>	<b>33</b>	<b>\$6,818,499</b>	<b>63.59</b>	<b>37</b>	<b>7.5</b>

\* YTD

# RESEARCH AWARDS TO ENGINEERING PIS



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## Total Dollars Awarded to Engineering Faculty

	01/01/2019 to 11/30/2019*				
Dept.	New	Competing Renewal	Non- Competing Renewal	Supplement	TOTAL
AE	\$802,270	\$0	\$58,072	\$95,950	\$956,292
CCEE	\$740,809	\$0	\$0	\$72,654	\$813,463
ECE	\$1,258,574	\$245,029	\$70,000	\$350,000	\$1,923,603
ME	\$1,365,927	\$400,000	\$1,027,214	\$332,000	\$3,125,141
TOTAL	\$4,167,580	\$645,029	\$1,155,286	\$850,604	\$6,818,499

\* 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

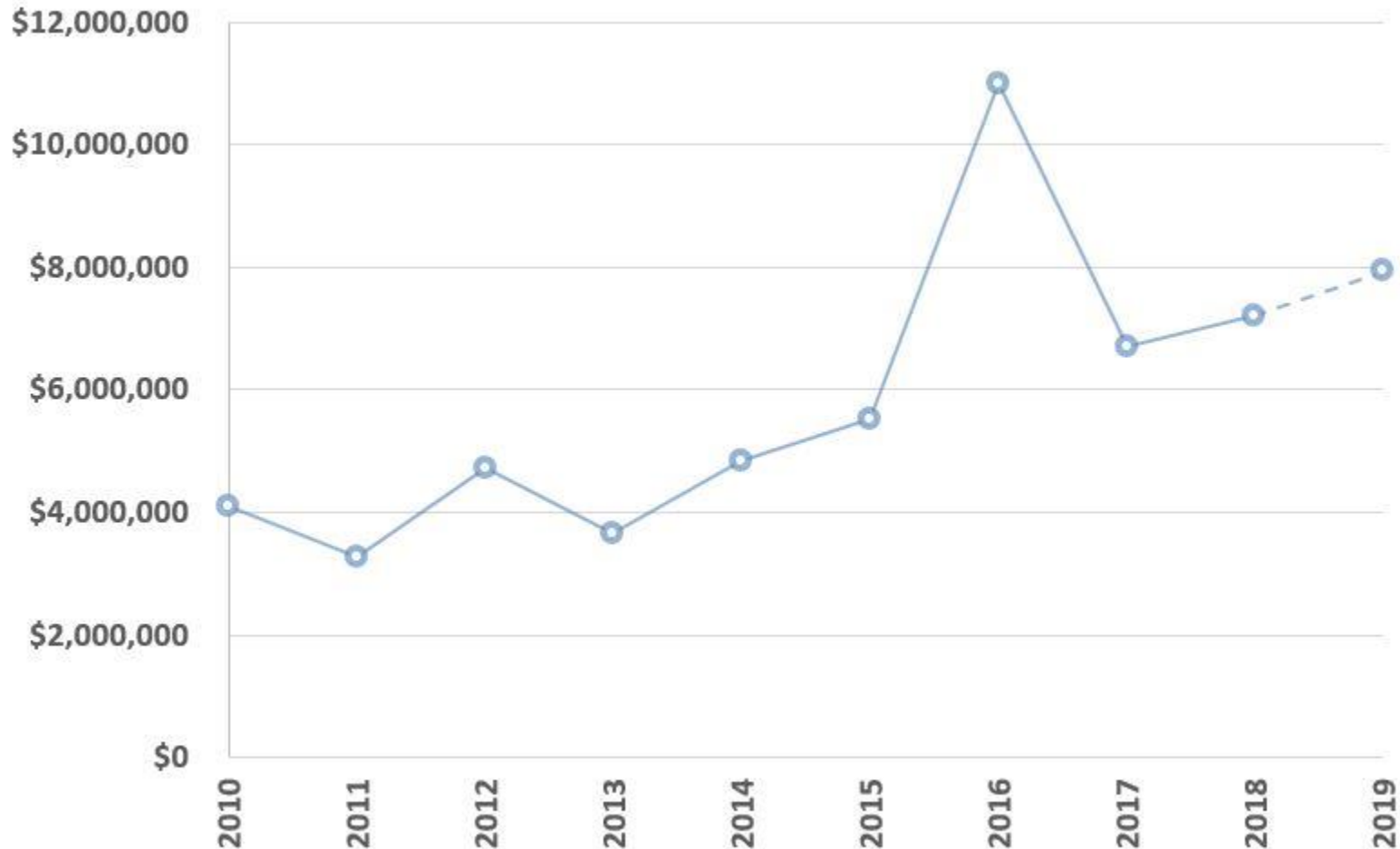
# RESEARCH AWARDS TO ENGINEERING FACULTY



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Total Dollars Awarded to Engineering Faculty CY 2010 to 2019



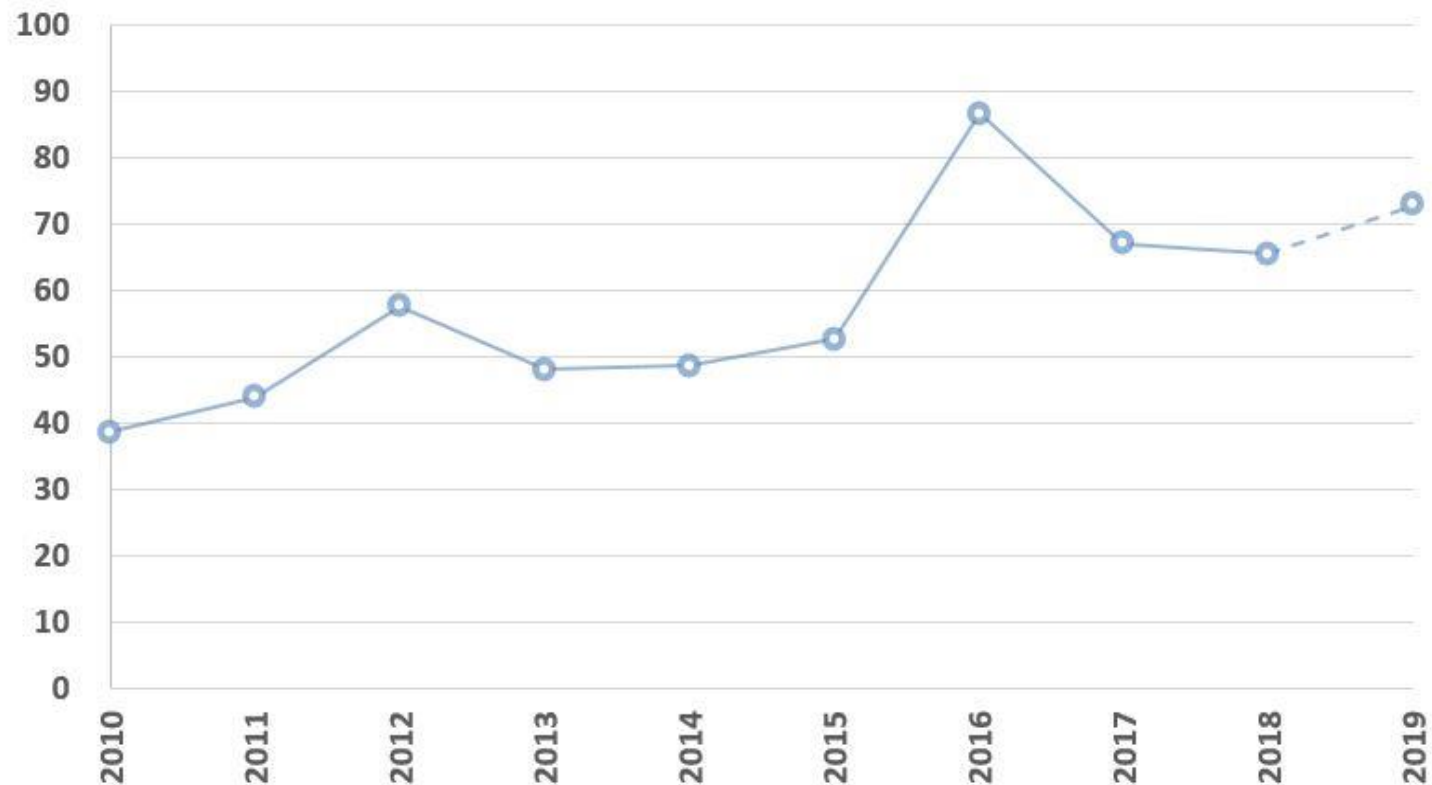
# RESEARCH AWARDS TO ENGINEERING FACULTY



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





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# UNDERGRADUATE PROGRAM UPDATE

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# 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)*

# EXCEPTIONS (EO 1100)



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- In the case of high-unit major degree programs, the Chancellor may grant exceptions to one or more requirements for students completing the particular program.
- Such exception must be approved at the campus level prior to initiating a request to the Chancellor's Office. A full academic justification shall be submitted to the Executive Vice Chancellor for Academic and Student Affairs, who shall submit his or her recommendation and the campus recommendation (along with all relevant documents) to the Chancellor.



## AREA A.3 : CRITICAL THINKING

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- 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.

# REMOVE AREA B RESTRICTIONS



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Executive Order 1100, which governs General Education in the CSU System, requires that students complete a minimum of 12 semester units in the Natural Sciences and Quantitative Reasoning (Area B). Engineering students take 30 credit hours from Area B as required by ABET. The College is requesting a variance that would allow Engineering students to complete Area B with 12 unrestricted hours of coursework from approved Area B courses, rather than requiring them to complete specific subarea requirements.

**EO 1100** : Each campus is authorized to make reasonable adjustments in the number of units assigned to any of the five required distribution Areas (A through E).

# GE AREA D: EXPLORATIONS



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- **EO 1100** : Area D requires 12 semester units or 18 quarter units dealing with human social, political and economic institutions and behavior, and their historical background.
- The learning goals for area D are achieved by Engineering students in their capstone senior design course. Engineering capstone senior design share core values with upper division courses within **GE Area D (Explorations), Explorations in the Social Sciences**, which emphasize that students should be able to “analyze and critically evaluate the application of social science concepts and theories to particular historical, contemporary, and future problems or themes, such as economic and environmental sustainability, globalization, poverty, and social justice.”
- Accordingly, the College requests that Engineering majors be allowed to meet the learning goals for GE Area D (explorations) through completion of the capstone senior design course and project experience.
- The College will cooperate with the Division of Academic Engagement and Student Achievement (DAESA) to regularly assess Engineering students achievement of the CSU GE Breath Requirement Learning Goals.

# ANNOUNCEMENT

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- DECEMBER 5, 2019
- Senate Sponsored Town Hall Discussion
- General Education Graduation Requirement and the 120 Unit Cap, Engineering and Other cases.
- Time : 2:00 – 4:00
- Location : NE-60
- Appreciate our senators and faculty to participate and support for our proposal.

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 5, 2019 (Thu)** – 1:30pm-2:30pm – **CoE Staff Mtg** – Engineering Dean's Conf. Room
- **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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- ☐ Approval of 10/8/2019 CoE Faculty Meeting Minutes
- ☐ Other Business?



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**KYLE WELCH**

SDSU TECHNOLOGY TRANSFER OFFICE  
LICENSING MANAGER



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THANK YOU!