



SAN DIEGO STATE  
UNIVERSITY

**COLLEGE OF ENGINEERING**

**FACULTY MEETING**

APRIL 21, 2020

# 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**
  - Community & Communication**
  - Important Dates to Remember**
  
- Other Business**
  - Approval of 2/11/2020 CoE Faculty Meeting Minutes**
  
- Adjournment**



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# ANNOUNCEMENTS & UPDATES

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# DEVELOPMENT UPDATE



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- **Alumni Engagement**
  - SDSU has over 430,000 alumni – approximately 5% of all alumni are College of Engineering graduates (~ 20,000)
  - Alumni engagement events held during the 2019-2020 academic year: *Coffee with the Dean* and *Evening with the Dean*
- **Annual Giving Campaigns**
  - Dean's Giving Circle, Hard Hat Campaign, crowd funding for student organizations
- **Major Gifts**
  - \$2.6 million - Wayne E. & Mary Beitler Leutloff Bequest to Aerospace Engineering and EIS Complex
  - \$1.5 million – Siemens Software gift-in-kind of software licenses
  - \$700,000 – Associated General Contractors (AGC) gift to the J.R. Filanc Construction Engineering & Management Program, ACG Chair in Construction Management
  - \$100,000 – Richard Woodcock gift to the SDSU Rocket Project
  - \$100,000 – Harper Construction gift to the J.R. Filanc Construction Engineering & Management Program, AGC Chair in Construction Management
  - \$100,000 – Marathon Construction gift to the J.R. Filanc Construction Engineering & Management Program, AGC Chair in Construction Management

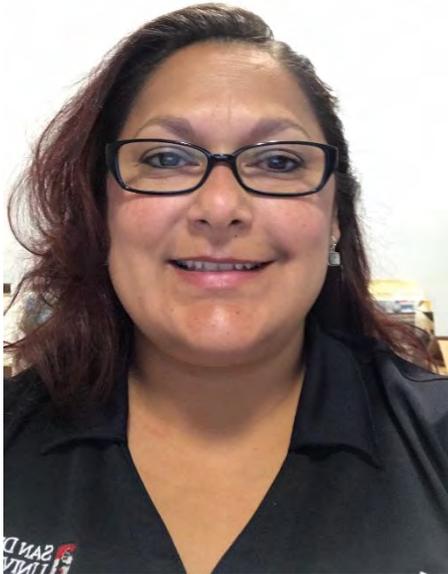
# ENGINEERING STAFF UPDATE

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## **Luisa Smith**

B.S., Recreational Administration, San Diego State University

### **Position:**

Department Coordinator for Civil, Construction & Environmental Engineering with over 16 years of service at SDSU

# FACULTY SEARCHES FOR 2020 - 21



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Department	Position Area	Level	VPAA #
<b>AE</b>	<b>Aerospace Engineering Design</b>	<b>Assistant</b>	<b>2020/21-18</b>
CCEE	Sustainable Infrastructure Engineering	Assistant	2020/21-17
ECE	Digital Signal Processing	Assistant	2020/21-15
<b>ME</b>	<b>Robotics &amp; Control</b>	<b>Assistant</b>	<b>2020/21-16</b>
CCEE	Coastal Engineering	Assistant	2020/21-72
CCEE	Sustainable Infrastructure	Assistant	2020/21-70
CCEE	Water Engineering	Assistant	2020/21-71
<b>ME</b>	<b>Advanced Materials Processing</b>	<b>Assistant</b>	<b>2020/21-73</b>
ME	Computational Mechanics	Assistant	2020/21-75
ME	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

**Searches Successfully Completed**



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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

## Proposals Submitted by Engineering Faculty

	07/01/2018 to 04/10/2019		07/01/2019 to 04/10/2020		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	18.00	5	13.50	7	-25.0
CCEE	16.37	11	22.66	13	38.4
ECE	30.05	16	37.04	16	23.3
ME	32.25	13	36.99	16	14.7
<b>TOTAL</b>	<b>98.67</b>	<b>47</b>	<b>111.19</b>	<b>53</b>	<b>12.7</b>

# RESEARCH AWARDS TO ENGINEERING PIs

## Total Dollars Awarded to Engineering Faculty

	07/01/2018 to 04/10/2019			07/01/2019 to 04/10/2020			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	\$565,188	6.00	5	\$674,964	5.34	5	19.4
CCEE	\$1,678,200	13.00	9	\$1,223,403	11.00	9	-27.1
ECE	\$1,331,504	12.00	8	\$1,484,939	15.00	8	11.5
ME	\$2,692,049	19.25	11	\$2,307,508	19.00	10	-14.3
<b>TOTAL</b>	<b>\$6,886,593</b>	<b>56.25</b>	<b>35</b>	<b>\$5,700,814</b>	<b>52.34</b>	<b>33</b>	<b>-17.2</b>

# JOINT DOCTORAL PROGRAM

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- University Grant Fellowship
  - 11 JDP students nominated (by Faculty)
  - Nominations submitted to Graduate and Research Affairs
  - Decision expected in May 2020

# JOINT DOCTORAL PROGRAM



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- 87 applications received for Fall 2020\*
  - 12 CA resident
  - 75 International & Nonresident
- 39 recommended for admissions by SDSU JDP Steering Committee
  - 23 applications currently being reviewed at UCSD Departments
  - 16 applications (either missing supplemental application or have not identified advisor)

*\* F2020 counts are as of Friday, April 10, 2020*

# NEW CA RESIDENT MASTER'S SEEKING\*

Master's Programs	Applications		Admits	
	F 2019	F 2020	F 2020	F20 Target
Aerospace Engineering	28	25	9	22
Bioengineering	16	16	11	10
Civil Engineering	30	26	17	24
Electrical Engineering	27	42	28	24
Environmental Engineering	7	2	2	6
Master of Engineering	6	0	0	2
Mechanical Engineering	34	29	9	25
	<b>148</b>	<b>140</b>	<b>76</b>	<b>113</b>

\* F2020 counts are as of Friday, April 10, 2020

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

Master's Programs	Applications		Admits	
	F 2019	F 2020	F 2020	F20 Target
Aerospace Engineering	24	17	6	17
Bioengineering	15	13	6	11
Civil Engineering	42	36	8	17
Electrical Engineering	140	116	65	72
Environmental Engineering	13	2	2	7
Master of Engineering	8	8	1	1
Mechanical Engineering	34	41	8	20
	<b>276</b>	<b>231</b>	<b>96</b>	<b>145</b>

\* F2020 counts are as of Friday, April 10, 2020

# 2021 U.S. NEWS BEST GRADUATE SCHOOLS RANKINGS



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	2021 Ranking	2020 Ranking
SDSU(Engineering)	Tied 133	Tied 141
Aerospace Engineering	Tied 53	Tied 53
Bioengineering	Tied 107	Not Published
Civil Engineering	Tied 75	Tied 89
Computer and Electrical Engineering	Tied 106	Tied 122
Mechanical Engineering	Tied 94	Tied 94



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# UNDERGRADUATE PROGRAM UPDATE

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# GENERAL EDUCATION UNIT REDUCTION



- CSU requires 49 total GE units for graduation
- SDSU. *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 (10 units)*
  - *B.1 (Phys Sci), B.2 (Life Sci), B.3 (Lab), B.4 (math/quant reasons)*
- *Area C: Arts and Humanities (9 units)*
- *Area D: Social Sciences (9 units)*
- *Explorations in Arts and Humanities (3 units)*
- ~~*Explorations in Social Sciences (3 Units)*~~
- ~~*Explorations in Natural Sciences and Quantitative Reasoning (3 units)*~~
- ~~*Area E: Lifelong Learning and Self Development (3 units)*~~

We received approval to choose any math and science course among approved GE courses. This will not reduce our GE units, this will provide flexibility to programs in choosing courses.

# ENGINEERING MAJORS

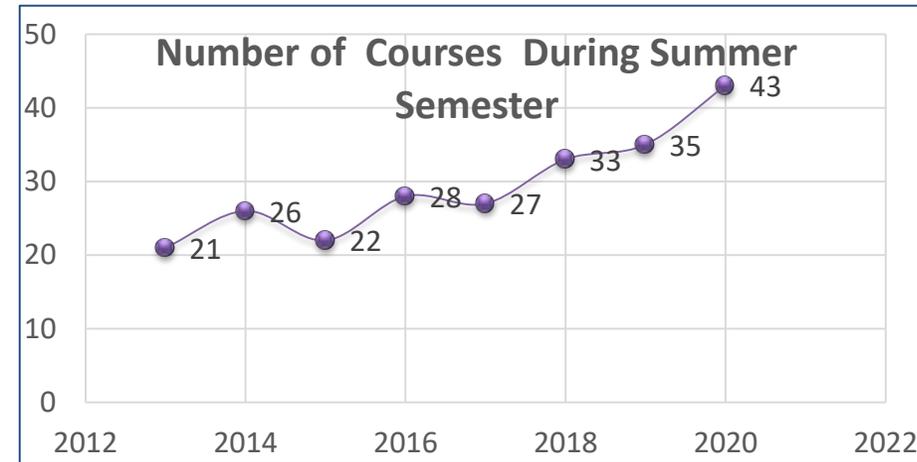
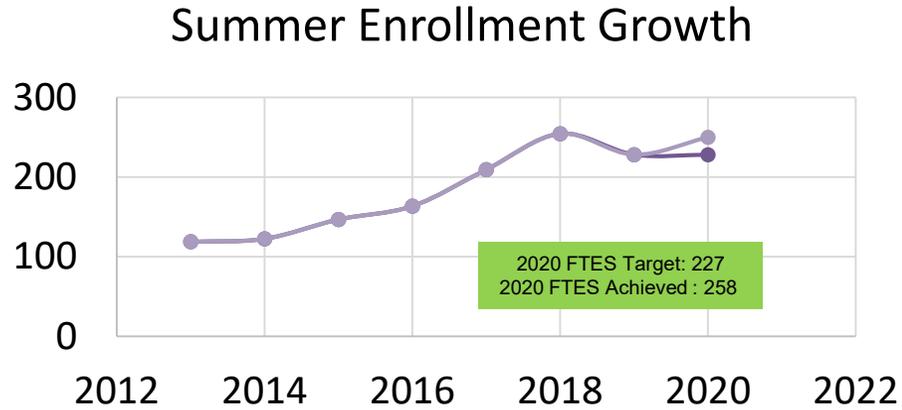


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Program	Fall 2019 Units	Reduction from Major	Reduction in GE Units	Credit hours after unit reduction
Electrical Engineering	133	7	9	117
Computer Engineering	132	6	9	117
Mechanical Engineering	140	14	9	117
Civil Engineering	138	3	9	126
Construction Engineering	133	3	9	121
Environmental Engineering	136	9	9	118
Aerospace Engineering	140	8	9	123

# SUMMER 2020 PROGRAM



- Summer 2020 (ALL ONLINE)
- 44 total courses
- 14 New summer courses
- AE 280, AE 340, AE 310, AE 200
  - ENVE 320, CONE 480, ENVE 442
  - COMPE 270, EE310, EE204, EE410 EE 210
  - ME 555, ME 496

# CENTER FOR STUDENT SUCCESS IN ENGINEERING (CSSE)



## CSSE and CoE Student Affairs Virtual Student Success Initiatives

Largest offering of courses with tutor support ever!

Peer Advisors quickly adapted to provide virtual advising

NEW Saturday advising option added

Spring 2020 Engineering Virtual Advising (via Zoom) To schedule, go to <https://calendly.com/csseadvising>

	Monday	Tuesday	Wednesday	Thursday	Friday
9:00 AM					
9:30 AM					
10:00 AM					
10:30 AM					
11:00 AM	Flainey 10am-2pm Civil, Construction, and Environmental Engineering	Zach 9am-5pm Computer and Electrical Engineering	Flainey 10am-2pm Civil, Construction, and Environmental Engineering	Alan 9am-5pm Aerospace & Mechanical Engineering	Alan 9am-1pm Aerospace & Mechanical Engineering
11:30 AM					
12:00 PM					
12:30 PM					
1:00 PM					
1:30 PM	Alan 2pm-5pm Aerospace & Mechanical Engineering	Zach 9am-5pm Computer and Electrical Engineering	Zach 9am-5pm Computer and Electrical Engineering	Alan 9am-5pm Aerospace & Mechanical Engineering	Zach 1pm-5pm Computer and Electrical Engineering
2:00 PM					
2:30 PM					
3:00 PM					
3:30 PM					
4:00 PM					
4:30 PM					

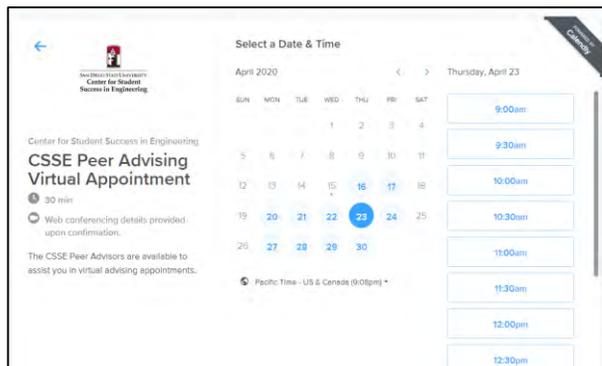


Free Drop-In Tutoring - Spring 2020

Click on using a digit access code CSSE prior to each tutoring session

COURSE(S)	DAY	TIME	STARTS	TUTOR & ZOOM MEETING LINK
AME 200 - Statics	M, W, T, Th, F	9:00 am - 10:00 am	Th 9:00	Zoom
PHYS 100 - Physics of Physics	M, Tu, W, Th, F	11:00 am - 1:00 pm	Th 9:00	Zoom
COEN 100 - Intro to Chemistry	M, Tu, F	9:00 am - 11:00 am	F 9:00	Zoom
COEN 200B - General Chemistry	Th	9:00 am - 11:00 am	F 9:00	Zoom
AME 200 - Dynamics	T, Th	9:00 am - 10:00 pm	Th 9:00	Zoom
COE 400 - Geospatial Engineering	M, W	9:00 am - 1:00 pm	M 9:00	Zoom
COMP E 100 - Computer Programming (C)	T, Th	9:00 am - 12:00 pm	Th 9:00	Zoom
E E 300 - Computational Statistical Methods	M, W, F	9:00 am - 12:00 pm	F 9:00	Zoom
E E 400 - Signals and Systems	T, Th	2:00 - 4:00 pm	Th 9:00	Zoom
E E 450 - Digital Signal Processing	M, W	9:00 - 11:00 am	M 9:00	Zoom
COE 300 - Mechanics of Materials	M, W	9:00 am - 12:00 pm	W 9:00	Zoom
ME 300 - Thermodynamics	M, W	9:00 am - 12:00 pm	W 9:00	Zoom
ME 320 - Thermodynamics	M, W	9:00 am - 12:00 pm	W 9:00	Zoom
ME 340 - Fluid Mechanics	T, W, Th	9:00 am - 12:00 pm	W 9:00	Zoom
ME 400 - Fluid Mechanics	T, W, Th	9:00 am - 12:00 pm	W 9:00	Zoom
MATH 141 - Pre-Calculus	W, S, Th, F	9:00 am - 12:00 pm	Th 9:00	Zoom
MATH 150 - Calculus I				

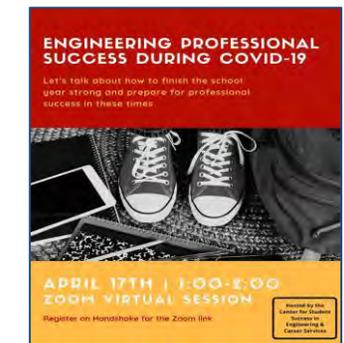
Calendly tool was set up for student body to book CSSE appointments



CoE Student Affairs team hosts Open Office Hours!



Partnered with Career Services to offer Internship & Career guidance sessions





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# COMMUNITY & COMMUNICATION

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# COE DIVERSITY, EQUITY & INCLUSION (DEI) COUNCIL



Fall 2019

## DEI Committee Tasks (Fall 2019)

- *College Data Analysis*
- *College Diversity Principle*
- *College Climate Survey*
- *Analyze Survey*

Spring 2020

## 3 SMART Goals (Spring 2020)

- *Come up with SMART Goals*
- *Submit to University DDI Council*

**S** : Specific  
**M**: Measurable  
**A**: Attainable  
**R**: Relevant  
**T**: Timely

## Goal#1:

**Improve Gender Diversity in Faculty**

## Goal #2:

**Create a Pathway for Students from URM backgrounds to enter Graduate Programs.**

## Goal #3:

**Climate to Promote and Nurture the Growth and Inclusion of students, faculty, and staff**

# FEMINEER® & WOMEN IN ENGINEERING



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Women in Engineering

- **Femineer® Office Hours**
  - New administrators/teachers/educators interested in starting program can ask questions, follow-up about teacher trainings & Spring/Fall events
  - Current teachers can ask questions, troubleshoot, have small breakout sessions with MTs, share best practices for at home teaching
- **Social Media (@Femineer SD)**
  - Sharing resources for parents/students/educators
  - Some updates (i.e. WE faculty Zoom meetings, partnered with local engineering teacher to make & donate ~500 n95 style 3D printed masks, & using Wearable Tech supplies to create fabric masks to donate)
- **Summer**
  - Femineer® Friday Activity or Challenge
    - Twitter/Instagram
  - Femineer® Teacher Webinars
    - Help with NEO LMS roll out

- **WE Faculty Monthly meeting**
  - November-March: in-person
    - Worked on grant together
  - April-now: Virtual Zoom meetings
- **Working on WE webpage**
  - WE faculty profiles, WE events (i.e. WE Chat, WE Do Coffee Hour, WE Industry Job Shadow/Networking Opportunities), Alumnae Connect
- **WE Do Coffee Hour**
  - Planning Spring Virtual Coffee Hours
  - Invite past WE Chat students and WE faculty
  - Will send flyer on Blackboard





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

## UNIVERSITY SEGMENT

### Phase 1 - Transitioned Online:



### Phase 2 – Summer Engagement:

- Research Academy
- Research Academy Junior
- MESA Scholarships

### Phase 3 – Fall/Spring Engagement:

- Freshman & Transfer Courses
- Shadow Day
- Industry Training Academy
- Arduino Academy
- Leadership Conference
- Industry Info Sessions
- Resume Critique & Mock Interviews

#### Transition to Virtual STEM Engagements:

- *Virtual Tours (Industry & Lab)*
- *Virtual Alumni & Industry Panels*
- *Virtual Mentoring*
- *Virtual Projects (Coding, IDEA Accelerator)*

## COLLEGE PREP SEGMENT

### Student Engagement:



- Weekly **Virtual** STEM Modules
- Mentor/Career Exploration **Webinar** Series
- STEM Challenge (via **social media**)

### Teacher/Advisor Support:

- Direct support for teachers & students
  - Distance Learning Curriculum Development
  - Access to Student Advising Workshops
- CSU/UC Admissions Changes
- College Acceptance Support
- Life Skills Workshops
- Resume/Interview Workshops



# TROOPS TO ENGINEERS



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## Business as Usual:

- Supporting students with obtaining paid internship and jobs
- Working on supporting graduating seniors
- Coordinating with community partners for professional development events

## New ways to interact and support: “Adapt and Overcome”

- Zoom check-in with students
- Compiling and consolidating University and other relevant resources for students and adding to website
- Implementing a variety of virtual tools to efficiently communicate with students (themed youtube videos, virtual emails, Prezi, etc.)
- Virtual Professional Development events
  - ◆ Job Search Strategies During COVID-19 on 4/16/20
  - ◆ Mock interviews TBD

# WED 5/6 VIRTUAL ENGINEERING DESIGN DAY



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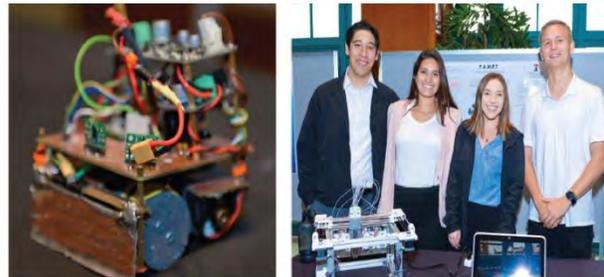
## Virtual Engineering Design Day

Wednesday, May 6, 2020

11:00am-12:30pm



 **SAVE THE DATE**  
SAN DIEGO STATE UNIVERSITY SDSU College of Engineering  
**2020 Virtual Engineering Design Day**  
Wednesday, May 6, 2020, from 11:00am - 12:30pm  
Please register at:  
[https://SDSU.zoom.us/webinar/register/WN\\_wjQznYzTQ1-uWs6O9eCEfw](https://SDSU.zoom.us/webinar/register/WN_wjQznYzTQ1-uWs6O9eCEfw)



- **11:00am-11:15am – General Session Webinar**
  - Remarks from President de la Torre
  - Overview of Design Day by Dean Olevsky
- **11:15am-12:30pm – 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 (will be active on 5/6)

# SPRING 2020/FALL 2020

## COE IMPORTANT DATES TO REMEMBER

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### Spring 2020

- **April 23, 2020 (Thu)** – 1:30pm-2:30pm – **CoE Staff Mtg** – via Zoom
- **May 6, 2020 (Wed)** – 9:30am-11:00am - **Engineering Dean’s Advisory Board Mtg** – via Zoom
- **May 6, 2020 (Wed)** – 11:00am-12:30pm – **2020 Virtual Engineering Design Day** – via Zoom

### Fall 2020

- **August 19, 2020 (Wed)** – 6:30pm-8:30pm – **Engineering Gathering** – Tom Ham’s Lighthouse
- **August 20, 2020 (Thu)** – 1:00pm-4:30pm – **CoE Fall 2020 Retreat** – Templo Mayor Conf. Room
- **December 2020** – **Engineering Banquet** – Details to be confirmed at a later date
- **December 2020** – **Engineering Commencement** – Details to be confirmed at a later date

# OTHER BUSINESS

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- Approval of 2/11/2020 CoE Faculty Meeting Minutes**
- Other Business**



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**THANK YOU!**