Annual Chapter Report
2018 - 2019
California State University (CSU)
Fresno State Beta Gamma Chapter

A. Initiations

Only the students who have achieved the class standing of Junior, 60-89 units completed at the university, or Senior standing, 90 units or above completed at the university, are considered eligible for membership in PTS. Out of the junior and senior standing mechanical engineering students at CSU Fresno, only the top 25% of juniors and top 35% of seniors are eligible to receive membership into our chapter. A minimum cumulative GPA requirement of 3.25 is also in effect for potential initiates. The PTS Fresno State Beta Gamma faculty advisor creates the eligibility list and gives the final list to the chapter president each semester. Once the list has been given to the chapter president, the entire officer team schedules meeting times for potential members in the Henry Madden Library on campus where a presentation about Pi Tau Sigma, its history, the requirements for the Beta Gamma chapter, and the benefit of initiating into this society are given. The officer team typically comes up with a scheduled meeting opportunity for potential members at least once a day within a chosen week. If any potential member who is interested in receiving more information about joining and is unable to attend any of the set informational meeting times, special accommodations are made for the individual to ensure that each potential member has an equal opportunity to join and no one is dettered. After the official informational meeting times have been set, the vice president and president split the duties in sending out personalized and formal email invitations to each potential member each semester. An example of the email template used to send to initiates this past academic year can be found in section C of this report.

Each potential member who is interested in going through the Beta Gamma initiation process must complete several tasks before the initiation day set at the end of the semester:: i) complete eight hours of community service, four of which must be volunteering for MESA Saturday Academies, ii) attend two social events, iii) complete the signature sheet (ME faculty, chapter officers, active non-officer members of PTS), iv) polish and mount the PTS brass key, v) submit an up-to-date resume, vi) pay initiation fees, and vii) attend initiation ceremony.

The community service requirement aspect of the initiation process is very important to the Beta Gamma chapter and we continue to encourage our members to give back to the community once they have completed the initiation process and become full members of PTS. Each semester there are at least two opportunities to serve at the MESA day Saturday Academies. At these academies, the PTS members lead science and engineering related workshops and activities for local junior high through high school students. These students compete against one another in teams and they have the opportunity to qualify to compete in regional, state, and national competitions. The Beta Gamma chapter has been involved in fostering this event held at the Lyles College of Engineering (LCOE) for many years and will continue to support its efforts in the years to come. Another great community service opportunity that occurs on campus, is the

Central California Engineering Design Challenge (CCEDC), a freshman engineering design competition that occurs in both the Fall and Spring semesters. In the CCEDC, freshman from introductory mechanical engineering programs at local universities and community colleges (up to five different schools, over 300 students comprising 80 teams) compete for the best overall design and performance. The competition includes submitting an expensed requisition form for the build materials, meeting all the specified design requirements to compete, fabricating a device to compete from the requisitioned material within the allocated time, competing in the event in order to maximize profit by gaining revenue through longest distance, lowest weight, faster time and/or other performance parameters depending on the particular challenge for that semester. The Beta Gamma chapter not only provides volunteers for the CCEDC each semester, but they financially support the event. Many cost factors go into running this event including, snacks and lunch for all of the contestants and volunteers, materials for the designed products themselves, and renting the building tables, chairs and space to conduct the competition. Between these two different community service opportunities, members are typically able to meet the eight hour requirement without additional activities; however, some initiates and members chose to also be a part of local community service opportunities. For this academic year we had individuals participate in helping at the Poverello House and the Art of Life Cancer Foundation. The Poverello House provides shelter and food for homeless people in the community and the Art of Life Cancer Foundation provides activities for individuals and families who have been affected by cancer as another form of a healing opportunity. Images that capture Beta Gamma members volunteering at community service events can all be found in section C of this report.

The officer team creates a calendar of events for each semester that typically includes at least three to four event opportunities each month. Some of these events are hosted by other engineering clubs on campus and are used as a way for networking and connecting PTS members and initiates with not only practicing mechanical engineers who are members of PTS, but also other non PTS engineers and even outside of the mechanical engineering discipline. Some clubs that we've partnered with this year include American Society of Mechanical Engineers (ASME), Tau Beta Pi (TBP), Society of Women Engineers (SWE), Society of Asian Scientists and Engineers (SASE), Society of Hispanic Professional Engineers (SHPE), and Association of Energy Engineers-SunDogs (AEE). Since we know that everyone is busy with school work, clubs, and other extracurricular events, we only require that potential members to attend two of these social events. One event that is mandatory for initiates is the scavenger hunt meeting. At this meeting, initiates are given a list of riddles and two hours to find and take a picture of the answer to the riddle. The winner with the most correct answers and quickest solve time receives a small prize. This event is held every semester at Woodward Park, a 340 acre park that is about ten minutes driving distance from the campus. It is also at this event where potential member receive the brass PTS key and wood plaque. Even though only two social events are required, we always encourage initiates to attend as many as they can to help them grow a strong network of engineering friends. To keep our members active, the officer team assigns points to all of the scheduled events and a member is required to achieve at least 50 Dog Bone points each semester to retain active

chapter member status. Chapter members who fail to meet this requirement are labeled as inactive and are unable to run for an officer position. A full list and description of the events held this academic year can be found in the following section of the report that details the chapter activities.

The signature sheet that is required for initiation into the Beta Gamma chapter, requires the signatures of the officers for that semester, ten mechanical engineering department professors, and seven non-officer members of the chapter. This is required of initiates, so that they have the "opportunity" to get to know professors and members before initiating into PTS. Many of the professors will even require the initiates to answer the question of why they believe initiating into Pi Tau Sigma will be beneficial to them before they will give their signature. These signature sheets are collected the day of initiation each semester.

The brass PTS key and wood plaque are given to the potential member about mid-semester. The initiates are required to polish the brass key and mount it to either the decorated wood plaque or to other material that they have formed into similar dimensions as the provided plaque. The reward for having the best polished key and best plaque is that the initiate has their initiation fee refunded and are only required to pay the honors society banquet fee. The votes for the best plaque and key are cast by the officer team during initiation and the winner is revealed at the end of the ceremony. After the ceremony, the plaques and keys are put on display in the Pi Tau Sigma display case at the entrance to the engineering building. Students can opt to have their plaques and keys returned to them the semester in which they graduate, or they can choose to donate it to the chapter to remain in the display case. Examples of what the initiates did these past two semesters are shown later in this report.

A resume submission is required for every potential member, and if an individual does not complete all of the initiation requirements within a semester and chooses to initiate in a following semester, a new updated resume is required before the initiation process can commence. At all of the professional networking events held throughout the academic year these resumes are then put on a flash-drive and given to potential employers. The employers then review all of the resumes and interview those who have the right qualifications and potential for their open positions. Most of the positions offered are internships with the potential to be hired part-time or full-time afterwards.

Each potential member is required to pay their lifetime dues at the time of initiation. These dues help cover expenses for the national organization, Beta Gamma chapter, and the honors society banquet that is held every semester with the other engineering honor society organizations that have chapters at the Lyles College of Engineering at California State University Fresno [i.e, Tau Beta Pi (all engineering), Eta Kappa Nu (electrical and computer engineering), Chi Epsilon (civil engineering) in addition to Pi Tau Sigma (mechanical engineering)] .

Initiation starts with a gathering of all potential members followed by collection of the polished and mounted PTS brass keys, completed signature sheets, and membership fees. The potential members are then blindfolded and instructed to stay in a line guided by a PTS member, while being led through the engineering complex until the initiation room is prepared. When the initiates arrive at the darkened, initiation room they are guided to their seats. The ceremony is conducted by the current chapter president and

vice president who read from the PTS initiation booklet and recite the ASME code of ethics and canons. Initiates are asked to respond accordingly. The only light in the darkened room is from the reading lamps for the president and vice president and the projection monitor that displays the PTS crest and key. The initiation ceremony ends with initiates becoming members after signing the membership roll book and performing the PTS handshake with the attendees of the initiation, including active members, officers, and faculty. The winner of the most creatively-mounted key plaque is announced and chapter officers for the next semester are elected. An all-engineering honors banquet organized by California Rho chapter of Tau Beta Pi is held the evening of the initiation and includes members of Pi Tau Sigma (PTS), Tau Beta Pi (TBP), Eta Kappa Nu (HKN), and Chi Epsilon (CE). The Fall 2018 initiation was held on Thursday, December 13, 2018 and welcomed four student members and one honorary member to PTS. The Spring 2019 initiation was held on Thursday, May 9, 2019 and welcomed five student members of PTS.

B. Chapter Activities

The Fall 2018 PTS Beta Gamma activities included seventeen (17) different events. The academic year was kicked off in August with a Beta Gamma officer meeting where the semester schedule was thoroughly planned out. The first events of the semester were held in September and included, the Lyle's College of Engineering (LCOE) welcome back BBQ, initiate meetings, bowling and billiards night, and the Lyles LCOE Xcape room officer council meeting. The welcome back BBQ is an event held every fall by the engineering college and showcases all of the engineering clubs, as well as, industry partner booths looking to hire engineering students. This event typically contains about a fifty booths and PTS is fortunate to get a spot to represent the mechanical engineering honor society to be able to encourage younger students to work towards initiation in their later years of study. The next round of events were held in October and included: day at the park, game night, LCOE officer council meeting, and movie night. Day at the park was co-hosted with SunDogs who provided pizza for members that participated. Movie night was co-hosted with ASME who graciously allowed us to join them and use their reserved on-campus room. November started out with the first MESA day volunteering opportunity and the CCEDC competition. The remaining November activities included: LCOE officer council meeting, the second game night, study night, and the scavenger hunt meeting. December was filled with the second MESA day volunteering opportunity, the second study night, the key polishing and plaque decorating night, broomball, Fall initiation, and the Fall engineering honors society banquet.

The Spring 2019 PTS Beta Gamma activities included twenty (20) different events. This semester started off in January with a Beta Gamma officer meeting where all of the semester events were chosen and a calendar was made available to members. The first member events started in February and included Super Bowl party, LCOE officer council meeting, LCOE basketball night, PTS National Convention at Colorado State, movie night, and initiate meetings. The Super Bowl party event was a bowling night at the university's bowling alley and members were encouraged to bring guests to the event for greater networking. The LCOE basketball night was a night for all engineering students to attend and be recognized at the university basketball game, as well as, be entered to win sweet prizes through the college. The Beta Gamma chapter was fortunate

enough to be able to send four members of the officer team to the national convention hosted at Colorado State and returned home to share their enriching time with fellow members and potential members. March was filled with the professional networking night hosted by the collaboration between SHPE, SASE, and SWE, the first MESA day volunteering opportunity, Pi Day (co-hosted in the college by LCOE, Tau Beta Pi, and PTS all of whom supplied and served pie), LCOE officer council meeting, the beach volleyball and BBQ day, the Mechanical Engineering Awards banquet, LCOE battle of the engineers competition, scavenger hunt meeting, and study night. The events in April included: the CCEDC freshman design event, soccer, the second MESA day volunteering opportunity, LCOE officer council meeting, and movie night with ice cream co-hosted with Tau Beta Pi. May wrapped up the academic year with events such as broomball, study and PTS key polishing night, Spring Initiation, and the Spring engineering honors society banquet.

C. Other

Fall officer team from left to right: Antonio Fornes (Historian), Amanda Nuckols (Vice President), Apolinar Quintero (President), Adithya Keshav Mohan (Alumni Chair), George Martin (Secretary), Austin Bain (Treasurer)

Fall officers, members, and initiates at initiation

Spring officer team from left to right: Bailey Gong (Treasurer), Yerli Cervantes (Historian), Amanda Nuckols (President), Adithya Keshav Mohan (Alumni Chair), George Martin (Secretary), Edward Mendoza (Vice President)

Fall officers and members leading the initiates
Through the pre-initiation ritual

Spring officers leading the initiates through the pre-initiation ritual

Spring initiates decorated plaques and keys

Spring officer team at Colorado State for National convention during

Beta Gamma officers with other chapter PTS members at the New Belgium tour offered the national convention

Spring president Amanda Nuckols at the Mechanical Engineering Banquet with her boyfriend and fellow ME student

Spring officers exploring Fort Collins

Pi Tau Sigma CSU Fresno
to me

7:57 AM (0 minutes ago)

Pi Tau Sigma: National Mechanical Engineering Honor Society

Dear (INSERT INITIATE NAME HERE),

Congratulations on your fine scholastic record as a student of Mechanical Engineering at California State University, Fresno. Fresno State hosts the 171st chapter of Pi Tau Sigma, the National Mechanical Engineering Honor Society. On behalf of the Beta Gamma Chapter, it is our pleasure to inform you that your high level of academic achievement and strong character grants you eligibility to join our society.

We invite you to attend an informational meeting to learn more about Pi Tau Sigma. There are six different meeting opportunities that will be held in the Henry Madden Library:

List all meeting opportunities here in bullet point format and make sure to delete this note

- Day (MTWTHF), Month Date: Officer Name (Officer Position)
  Time (00:00-0:00AM/PM) Room XXX

The members of the Fresno State Beta Gamma Chapter are proud of their growing involvement within the college and the local community. They are individuals who not only strive for academic success, but who also wish to better the world, while at the same time are having fun! Our chapter is growing rapidly, and we have many exciting activities planned for the coming semester.

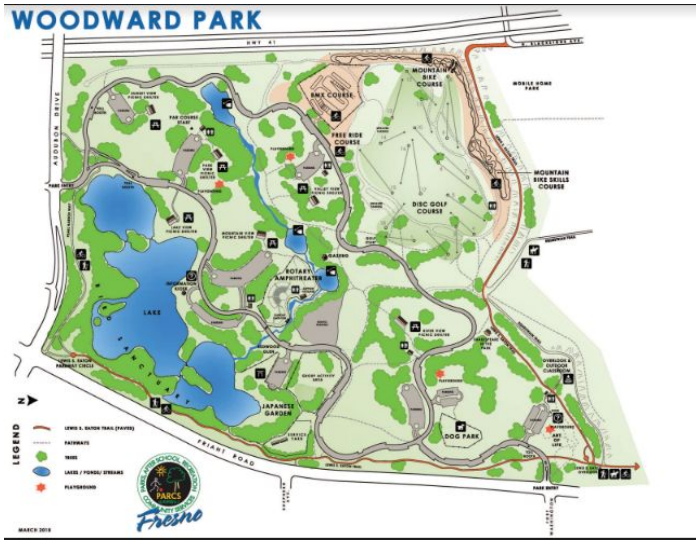
I urge you to seriously consider learning more about Pi Tau Sigma, as membership is both an honor and an important asset to your career. If you have any questions, or if you are interested in joining and cannot attend any of the meetings, feel free to email us for information. Also, please feel free to visit the Pi Tau Sigma website at www.pitausigma.net.

We look forward to seeing you and hope that you will become an active member of Pi Tau Sigma.

Sincerely,

(YOUR NAME)
(YOUR POSITION)
Pi Tau Sigma, Beta Gamma

2018-2019 Initiate Invitation Letter



Scavenger hunt meeting park map

Members hanging out during the Fall Scavenger Hunt Meeting while initiates search for the answers

Fall president Apolinar Quintero slack-lining during the Scavenger Hunt Meeting

Members at the Fall broomball event

Members at the Spring broomball event

Members at the spring study night

Members at a Fall game night

LCOE officer council Xcape room meeting

Welcome back BBQ event display booth

Beta Gamma members getting ready for the beach volleyball game

Beta Gamma and CSU Fresno students at the soccer event

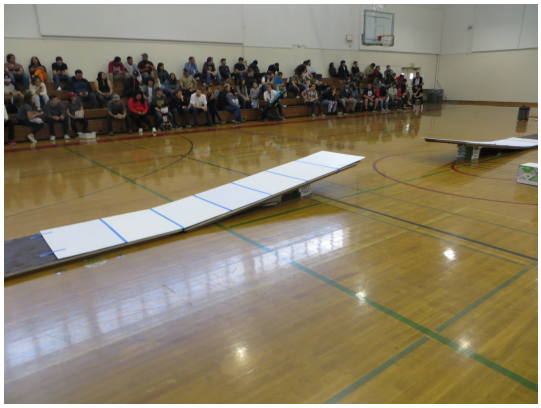
Soccer game that broke out during the beach volleyball event

Members slack-lining at the Fall day at the park event

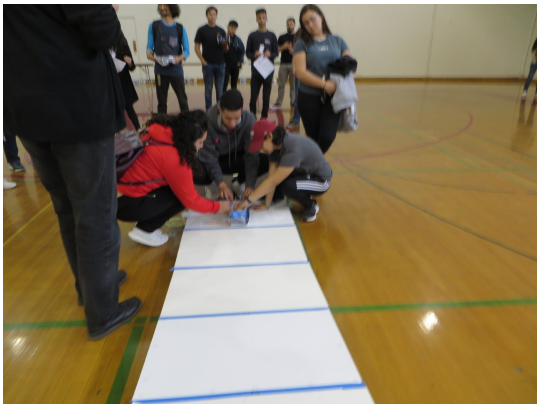
Grilling at the beach volleyball event to provide members with free burgers and hot dogs

CCEDC Fabrication Phase Using Requisitioned Material

CCEDC finished devices in quarantine before competition



CCEDC "field" (start on Left, finish to right) with spectators



CCEDC ready to release the device to go ramp

CCEDC winning team with PTS-BG chief advisor on left