Pi Tau Sigma Annual Chapter Report
2019-2020
Maryland Tau Mu Chapter

A. Initiations

Procedures and Requirements

At the beginning of each semester, a list of inductees is formed by the advisors for the Mechanical Engineering Department. The list is formed for the top 25% of the Junior Class and Senior Class, and the top 25% of the Graduate Class. These inductees are contacted to attend an information session and sent the inductee form. Before initiation into the Tau Mu Chapter of Pi Tau Sigma, each inductee must complete all of the following requirements:

1. Attend an information session on one of the dates specified
2. Obtain 10 signatures of Pi Tau Sigma Members, 5 signatures of Pi Tau Sigma Faculty, 1 Signature of the Pi Tau Sigma Advisor (Dr. Sandborn), and 10 signatures (depending on induction class size) of Pi Tau Sigma Inductees.
3. Attend 3 professional events and 2 social events sponsored by Pi Tau Sigma or approved by the Pi Tau Sigma Executive Board. Examples of Professional events include attending a career fair, an employer information session, or a lecture given by a faculty member. Examples of a social event include a game night, movie night, or ice cream social.
4. Pass the Inductee Exam.
5. Payment of $65 in dues to treasurer at initiation
6. Attend an initiation ceremony.

Fall Initiation

In the Fall 2019 semester, the Maryland Tau Mu chapter inducted 8 new members. The ceremony was held on November 20, 2019. The initiation followed the chapter's standard procedures. Upon arriving, the initiates must take and pass the Inductee Exam, which covers content on the history of the organization and some basic engineering problems. Following the exam, the chapter holds the ceremony and a celebration dinner.

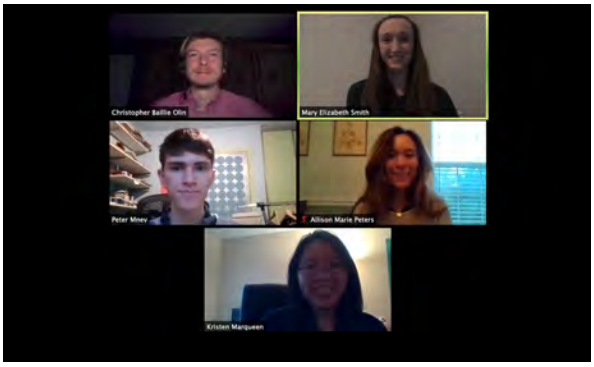
Fall 2019 Inductees

Fall 2019 Inductees with Board Members

Spring Initiation

The Spring 2020 initiation procedures varied from the standard procedures due to the effects of COVID-19 and the shift to online learning. The requirements were adjusted, reducing the number of required events to three. The signature requirement was also changed, instead requiring all inductees to do a virtual mentor interview with a current member. The exam, usually taken in person on the day of the ceremony, was shifted to an online open-note exam taken in the week before the ceremony. Finally, the ceremony was held on Zoom, inducting 18 new members to the chapter.

Main Ceremony Screenshot



Makeup Ceremony Screenshot

B. Chapter Activities

Fall 2019 Semester

In the fall semester, the chapter held 4 different types of events: professional events, social events, induction events, and mentor events for transfer students. More details about the new mentor program can be found in section C of this report.

1. Professional events were open to all members, inductees, and transfer student mentees. A list of the Fall 2019 professional events is below.

    a. Career Fair Workshop and Resume Critique (9/16) - This event was in partnership with the Engineering Career Services Office. A representative from the office attended to present a workshop to prepare students for the upcoming career fair.
    b. GE Personal Branding Workshop (10/2) - This event was sponsored by GE and was a joint event with many other engineering student organizations including ASME and SHPE.
    c. Key Tech Information Session (10/9) - This event was an information session about opportunities to work at Key Tech, a medical device consultant company.
    d. NASA Hubble Space Telescope Talk (10/28) - This event was a lecture by an engineer and University of Maryland graduate who worked on the Hubble Space Telescope.
    e. Lecture by Dr. Baz (11/6) - This was a lecture given by a member of the department faculty about his research.
    f. Dr. Sandborn Lecture (11/14) - This was a lecture given by our chapter advisor and faculty member about his research.
2. Social events were open to all members, inductees, and transfer student mentees. A list of Fall 2019 social events is below.
    a. Ice Cream Social (9/24) - This event was held over several hours in the lounge during the day so that students could stop in between classes to talk to members and spend some time in the lounge.
    b. Movie Night, Toy Story 4 (10/3) - This event was held at the movie theater on campus. Members and inductees met to get dinner in the food court before attending the movie screening together.
    c. Mechanical vs. Civil Engineering Kickball Game (10/25) - This event was hosted along with our student sections of ASME, ASCE, and Chi Epsilon. Students from both majors attended, as well as some faculty members to play.
    d. Game Night (11/7) - This event was a game night for members to bring and play board games in the lounge.
    e. Ice Skating (11/9) - Along with the student section of ASME, members were invited to go ice skating at a rink near campus.
3. Induction events were events that counted as points or requirements specifically for students meeting the new membership requirements.
    a. Inductee Information Session (9/12) - This event was a requirement for new inductees to learn about the process and requirements for joining the organization.

    b. Career Fair (9/17-9/19) - Inductees were allowed to attend the campus career fair and submit a photo of themselves in attendance to count as a professional point.
    c. Ceremony and Elections (11/20) - This was a required event for inductees to take the exam and participate in the ceremony. After the ceremony, food was provided for a celebration and elections were held for an open position on the executive board.
4. Mentor program events were events open to members and their transfer students mentees. In addition to these events, which were specifically for the mentor and mentee pairings, the transfer students were invited to some of the chapter's social and professional events, as well.
    a. Transfer Student Welcome Kickoff Event (9/11) - This event was designed to allow members to meet their new mentees. Food was provided and representatives from all of the engineering student organizations were invited to talk to the new transfer students about ways they could get involved.
    b. Study Night (12/2) - This was a wrap-up event for the mentor program. Students were invited to come to the lounge to study with classmates and get advice for upcoming exams.

<u>Spring 2020 Semester</u>

In the fall semester, the chapter held 4 different types of events: professional events, social events, induction events, and departmental involvement events. Many of these events were changed or cancelled due to the effects of COVID-19. All planned and held events are listed here, with explanations of any changes made to the event format.

1. Professional events were open to all members and inductees. A list of the Spring 2020 professional events is below.
    a. Career Fair Prep and Resume Workshop (2/13) - This event was a workshop led by students to give advice for attending the career fair and to workshop resumes.
    b. Alumni Presentation (3/5) - This event was a presentation given by a University of Maryland graduate on his experience in his career and advice for current students.
    c. Virtual Dr. Sandborn Lecture (11/14) - This was a lecture given over Zoom by our chapter advisor and faculty member about his research on technology obsolescence.
    d. Virtual Engineering Open Forum (4/16, 4/21) - This was a virtual event hosted by the California State Polytechnic University's chapter of Pi Tau Sigma, and open to other chapters, to ask engineers questions about their careers in various industries.

2. Social events were open to all members and inductees. A list of Spring 2020 social events is below.
    a. Game Night (2/26) - This event was a game night for members to bring and play board games in the lounge.
    b. Movie Night, Parasite (2/27) - This event was held at the movie theater on campus. Members and inductees met to eat dinner in the food court before attending the movie screening together.
    c. Paint Night (3/4) - This event was held jointly with the chapters of Tau Beta Pi and Sigma Gamma Tau. Painting supplies were provided for students and they were able to meet members of other engineering honor societies.
    d. Virtual Game Night (4/9) - This event was held virtually after the switch to online classes. Students participated in a virtual call while playing online versions of board games together.
3. Induction events were events that counted as points or requirements specifically for students meeting the new membership requirements.
    a. Information Sessions (2/11, 2/12) - Two information sessions were held for potential members to introduce them to the membership requirements. Inductees were required to attend one of these information sessions or notify the president if they were unable to attend.
    b. Career Fair (2/18-2/20) - Inductees were allowed to attend the campus career fair and submit a photo of themselves in attendance to count as a professional point.
    c. Virtual Member Call (4/20-4/28) - Inductees were paired with an active member and were required to complete a virtual interview. For inductees, this fulfilled the previous signature requirements. For members, this fulfilled the Departmental Involvement requirement for those who were unable to meet it with in person events earlier in the semester.
    d. Virtual Initiation Ceremony (4/29, 4/30) - A virtual version of the ceremony was held on Zoom, with a make-up ceremony the following day.
4. Departmental Involvement events were a part of the active membership requirements for returning members. Students were given several options and were required to participate in at least one to maintain active member status. This requirement was eventually changed due to many of the events being cancelled.
    a. Alumni Cup (2/15-2/21) - Alumni Cup is a Rube-Goldberg design competition held by the engineering school every year and each engineering department competes. Members were invited to help the mechanical engineering team on at least one design or build day

throughout the week to meet this requirement. Many members attended and the mechanical engineering team placed 2nd in the competition.

b. Department Golf Tournament - Every spring, the Department of Mechanical Engineering hosts a golf tournament fundraiser and members of Pi Tau Sigma assist throughout the day. This event was cancelled in Spring 2020.
c. Maryland Day - Every year, the campus hosts a major event where all departments, organizations, and groups on campus have booths for students, families, and any other members of the community to have fun and learn about the campus. Members would have participated by volunteering at the Department of Mechanical Engineering booth, but the event was cancelled for Spring 2020.

C. Other

Restructuring Organization

One of the primary goals for this year was to create a solid foundation for increasing the active membership of current members. This was done by presenting members with a list of active member requirements for the upcoming semester and requiring members to state whether they plan on being active. This also included setting incentives to be active, including t-shirts, eligibility to run for board, and discounted graduation regalia for seniors. This effort was very successful and led to many more members maintaining active status and participating in events and a large majority of members decided to meet the active member requirements.

In the spring, these requirements needed to be adjusted to account for the switch to online learning. Despite the obstacles, the members still participated fully, attending the required virtual events and maintaining communication with the organization.

Mentor Program

In the Fall 2019 semester, the chapter implemented the first semester of the Mechanical Engineering Transfer Student Mentor Program. This program was created by the Pi Tau Sigma chapter board and department faculty to partner incoming transfer students to the department with members of Pi Tau Sigma. The chapter invited the transfer students to some events so that they can get to know other students in their classes and become more familiar with the resources they have on campus. Approximately half of the incoming transfer students participated in the program and all active members of the chapter were required to sign up for a mentor or attend events with the students. The program was successful and will be continued and expanded in the Fall 2020 semester.

Departmental Involvement

In the Spring 2020 semester, the chapter wanted to maintain the strong relationship it had built with department leadership while working on the mentor program. As a result, the board created a requirement for active members to participate in at least one event that was run or sponsored by the department. There were three main events as options, which are described in Section B. Although only one of these events was able to fully take place, there was very high member participation in that event, along with a large number of students who signed up for the other events before they were cancelled. This initiative to keep members active in department activities will continue to be a major part of future semesters.