Pi Tau Sigma Annual Report

Drexel Xi Chapter

2019-2020 Academic Year

A. Initiations

Selection Process

The selection process for the Drexel Xi chapter of Pi Tau Sigma is dependent upon both the prospective members' academic record as well as their willingness to be involved in university activities. A list of prospective students in the Mechanical Engineering and Mechanics department at Drexel University who have met the academic requirements for the Pre-Junior, Junior and Senior class standing is provided by the Academic Advisor of the department to the President of the Drexel Xi chapter one month prior to the induction ceremony. Next, the Vice President of Pi Tau Sigma Drexel Xi contacts each prospective member to invite them to be a part of the honor society. The stipulations set out in the invitation to be inducted into the honor society are: (1) Attend an informational meeting explaining Pi Tau Sigma and (2) Attend the induction ceremony. We also host a dinner for the inductees following the induction ceremony to celebrate their accomplishment.

Requirements

Each prospective member must meet the requirements set forth by National Pi Tau Sigma via the Constitution and reinforced by the Drexel Xi Pi Tau Sigma Constitution. These academic requirements for Pi Tau Sigma Drexel Xi chapter are reflected as follows:

- student's ranking must lie in the upper 25% percentile of the student's respective classification
- A last term senior who is in the upper 25% percentile of the seniors' class, who is deemed worthy, may be initiated only upon permission of the Board of Directors

Within these ranges, Drexel Xi Chapter also requires a 3.5 GPA minimum. If there is not a reasonable number of students who meet the GPA requirement, as determined by the officers and advisor of the chapter, the range is opened to the edge of the range but not past the 3.25 GPA Nationally required floor.

Ceremony, Rituals, and Celebration

Induction ceremonies were held once during the 2019-2020 academic year. The fall induction ceremony was held during the fall quarter on Thursday, November 16th in the Mechanical Engineering and Mechanics Seminar Room with the members of the Pi Tau Sigma Drexel Xi executive board in attendance. There were 11 students inducted. The second induction ceremony was cancelled due to unforeseen circumstances involving the COVID-19 virus outbreak in efforts to help minimize the stress of students transitioning into the remote university environment. Our rituals uphold the script found in the Pi Tau Sigma National Constitution. Following the rituals of Pi Tau Sigma, a photo of the initiates with the present executive board members was taken in the Main Building of Drexel University. After each induction ceremony, initiates were invited to celebrate their achievements with the executive board with a dinner paid for by Pi Tau Sigma Drexel Xi chapter. The majority of initiates attended the celebratory dinner and found it a great time to network and meet new members of the organization. The inductees of the induction class are pictured below.

Fall 2019 Pi Tau Sigma Drexel Xi Induction Class

B. Chapter Activities

Leadership and Service

Pi Tau Sigma Drexel Xi works to keep a line of communication between faculty and students to better improve the effectiveness of course evaluations and general departmental improvements. A prime example of this was when two members of the board were asked to serve on the undergraduate promotion committee for a professor in the Mechanical Engineering and Mechanics Department during the fall term. This involved creating a survey to gauge the professor's quality of teaching, willingness to help and interact with students, and ability as a research and organizational advisor. The survey was disseminated, results were examined, and a report was written and submitted to the department head.

Another task of the chapter was to share the insights of the Mechanical Engineering student population with the rest of the department and the department head. The results from a previously sent out Pi Tau Sigma survey was analyzed within the group to determine how to communicate concerns to the department. In addition to this distributed survey, Pi Tau Sigma sent out an additional anonymous forum where Mechanical Engineering students can submit any feedback (positive and negative) of the department. These results were compiled into one document and submitted to the advisor to address such concerns to the higher authorities of the college and into the process of shaping the curriculum and the undergraduate student experience.

Professional Events

Every year Drexel Xi's chapter of Pi Tau Sigma works to host events geared towards professional development. During the 2019-2020 academic year, the main focus was resources to help students interested in pursuing the Fundamentals of Engineering exam. These events were held weekly in the Winter term, exploring different topics that will be present on the exam and studying actual questions from a Fundamentals of Engineering practice book that was donated by a member. The problems were presented to the students first as they collaborated with their peers around them and then the detailed solution was presented shortly after. This set up allowed for the students to think for themselves, then put their heads together, and then seek any additional help by asking questions once the answer was revealed. As this was held weekly, the attendance was consistent through the weeks and was such a success that it was recommended to continue these sessions in the following terms, potentially in conjunction with the ASME chapter at Drexel University.

Fundamentals of Engineering Exam Practice Sessions held in Winter 2019-2020

Social Events

To promote camaraderie and amiability amongst its members, Pi Tau Sigma Drexel Xi held social events during the 2019-2020 academic year. The first of which came after the fall induction where new and old members were invited to meet and mingle with one another over the Pi Tau Sigma hosted dinner. The second social event was after one of the Fall general body meetings where the members were able to play a game of Kahoot! that focused on Mechanical Engineering quiz questions. The engineering quiz tested the members' knowledge and understanding of concepts learned in the classroom and challenged them with questions about the people who invented such concepts, as well as provided a sometimes needed refresher of different topics. Another event was a Zoom session that was held in the Spring term to socially engage with other members while still in quarantine.

Zoom social session held in Spring 2019-2020

Fundraisers

The Drexel Xi chapter utilized four means of funding for the organization this year. The first is from dues; at the time of initiation, students are asked to pay $60, $35 of which is for national dues and $25 of which is designated for the Drexel chapter. A large portion of funding is subsidized by the Student Activity Fee Allocation Committee (SAFAC), for which Pi Tau Sigma applies each year. The executive board applied for specific funding from both the College of Engineering and SAFAC to pay for the cost of sending four board members to the 2020 convention and to pay for the induction dinners. In addition to this, the chapter applied to the ASME Philadelphia Proposal Engineering Slam which was started to help fund different projects that help promote the Mechanical Engineering field. The process of this competition was an initial project proposal submission that laid out the context of the desired project and the estimated costs associated with each aspect. The second half of the process included a presentation of said project/event in front of a panel of professionals from all around the University as well as the Philadelphia ASME board. Pi Tau Sigma was granted $800 from this competition and plans to utilize these funds appropriately in the next term that presents on-campus opportunities.

Engineering Project Slam for groups to fundraise money for proposed projects/events

University Events

Open houses held by the Mechanical Engineering and Mechanics Department and College of Engineering for prospective and accepted students are scheduled throughout each quarter at Drexel University. Having their own table among other departmental organizations, Pi Tau Sigma members were able to share experiences and knowledge not only of the Drexel University system and atmosphere but of Engineering and more specifically Mechanical Engineering to better inform those considering a similar path of study. In addition to the open house, executive board members were also present at the Campus Involvement Fair where a station was set up with a tri-fold board presenting the opportunities that Pi Tau Sigma presents to different students. Freshmen were able to come up and discuss said opportunities and their potential for membership when their time comes in the coming years.

College of Engineering Fall Open House

Chapter Meetings

Drexel Xi chapter meetings were held at various levels of operations within the organization. Throughout each quarter (fall and winter) of the 2019-2020 academic year, weekly meetings were held for the officers of Pi Tau Sigma. Meetings were typically at around 5:00pm or 6:00pm in order to accommodate the schedules of those at Drexel with class as well as those on co-op. These meetings were approximately one hour long with a detailed agenda, subsequent action items, and minutes. General body meetings were also held by the chapter to ensure transparent, consistent communication between the executive board and its members. There was also the matter of electing the new members of office. Members were elected democratically within the organization, some of which went unopposed, but nonetheless were announced to the general body.

National Convention

Four members of the Drexel Xi chapter attended the 99th annual Pi Tau Sigma convention held this year at Rochester Institute of Technology (RIT) in Rochester. NY. Overall, the experience was a great event to network with other high achieving Mechanical Engineering students from universities across the country and around the globe. Attending members were able to talk with leaders from thriving and struggling chapters alike, learn from their successes and failures, and share Drexel Xi's experiences with them as well. For example, there were many different perspectives gained from conversing with these students about different events to hold, especially service-based events. The attending members intend to use this experience to help improve the chapter with more service moving forward. Interacting with fellow Pi Tau Sigma members and participating in professional and social events at the convention also motivated the attending members as leaders of the chapter, which they hope to spread to the chapter's

members. Two of the four members that attended the convention were existing board members, while the other two were freshly inducted Pi Tau Sigma members. The interaction between these members allowed for further interest in pursuing leadership roles in this organization and influenced them to run for executive board positions for the 2020-2021 academic year, in which both members were successful.

Drexel Xi chapter members and executive board members alongside organization advisor, Dr. Antonios Kontsos

C. Other

2019-2020 Academic Year Officers

President: **Angelica Batista**
Vice President: **Evelyn Kamuyu**
Treasurer: **Kevin Cunningham**
Event Coordinator: **Kevin Legge**

Faculty Advisor: **Dr. Kontsos**

2020-2021 Academic Year Officers

President: **Sarah Andrieux**
Vice President: **Sanjog Karki**
Webmaster**: Evelyn Kamuyu**
Treasurer: **Connor Silvia**
Event Coordinator: **Angelica Batista**

Faculty Advisor: **Dr. Kontsos**