Pi Tau Sigma Annual Chapter Report
2012-2013
Georgia Tech Nu

A. Initiations

The initiation process during the 2012-2013 academic school year was relatively consistent with the initiation processes conducted in the past few years. The selection process began with an invitation to all mechanical engineering students who were either juniors or seniors and were in the top 25% or 33% of their graduating class, respectively. The invitational e-mail was generated by the vice president and was officially sent out to all qualified students by the university president. Two information sessions were then held the following week of sending the e-mail to provide all interested students with more information about the purpose, ideals, and activities that Pi Tau Sigma Nu (PTS Nu) conducts throughout the semester. In order to be initiated as a member of the Nu Chapter, all initiates had to meet the following requirements had to be met by all initiates:

- **Have completed at least two mechanical engineering courses**
  The purpose of this requirement is to ensure that students who are considered juniors and seniors by credit hours have in fact completed core classes of the mechanical engineering major.
- **Attend the information session about Pi Tau Sigma Nu**
  PTS Nu requires all interested students to attend one of the two information sessions held at the beginning of the semester. If they are unable to attend due to certain circumstances, the students can meet with an officer to receive all of the necessary information regarding the organization.
- **Obtain two mechanical engineering faculty recommendation signatures**
  Although a formal letter of recommendation is not required, the Nu Chapter asks for recognition from the faculty to acknowledge the student's integrity and academic excellence.
- **Obtain five Pi Tau Sigma member signatures**
  The main purpose of this requirement is to encourage the more timid and shy students to meet with the members of the Nu Chapter, allowing the students the opportunity to network and ultimately gain more from the organization.
- **Pay $70 lifetime dues**
  In addition to providing students with a form of financial commitment, the dues help the Nu Chapter with membership financial commitments and activities.
- **Polish Pi Tau Sigma Key**
  Many years ago, the original requirement was to have all initiates to clean and polish the large Pi Tau Sigma plaque that stands in front of Georgia Tech's mechanical engineering department; however, due to continuous problems with oxidation and aging of the plaque, we have required all initiates to devote their time with polishing the individual bent keys. The purpose of this requirement is twofold: the students must show their commitment by dedicating hours to properly clean and polish the key, and this process encourages the students to work together and utilize the tools provided by the Maker's Club, a student-run organization that recently created the Invention Studio to provide students with the tools and machines for creating their personal and class projects.
- **Attend two Pi Tau Sigma events**
  Events classify as social gatherings, factory tours, company information sessions, presentations, and other Pi Tau Sigma-sponsored activities. Because of the high demand

of students' time to their academic studies, the Nu Chapter maintains a minimum requirement of two events. Over the years, PTS Nu has determined that initiates who participate in only two events can still form bonds with other initiates and members within the organization.

- **Attend all weekly meetings**
  Initiation meetings are when announcements, discussion, and planning for the upcoming weeks occur. Initiates are expected to participate and provide feedback with the officers.
- **Conduct a self-introduction to the at one of the weekly meetings**
  The presentation is intended to introduce the new initiate to the rest of the organization. Each presentation should address the presenter's interests, reason for choosing mechanical engineering, and interesting facts about him or herself.
- **Pass the initiation examination**
  The initiation exam is a set of questions about facts and general knowledge about Pi Tau Sigma and its history. Initiates are expected to accurately answer most of these questions before the end of the semester. All of the information that is on the exam can be found in the initiation packet given to each of the initiates at the beginning of the semester.
- **Complete a community service project**
  In observance of Pi Tau Sigma's objective to "foster high ideals of the engineering profession…and the assumption of the responsibilities of a citizen in a democracy," PTS Nu requires all initiates to volunteer at a community service project. When possible, these projects are tailored towards engineering-related projects to allow the initiates to witness the service opportunities of a mechanical engineering degree.
- **Attend Guggenheim Lecture Series on Innovation**
  The purpose of this requirement is to engage the initiates in topics and fields of mechanical engineering that are normally not clear in their classes alone. Because no such lecture was available during the spring of 2013, a replacement was to have initiates attend the 8th Annual Undergraduate Research Symposium, where approximately 200 students present their research projects with faculty from each college.
- **Attend the mandatory initiation ceremony and banquet**
  There are two initiation ceremonies held each year – one ceremony for each semester. The ceremony is conducted by the President and Vice President, and the procedure follows the Rituals of Pi Tau Sigma, provided by Nationals. Formal business attire is required by all participants, and a celebratory banquet follows with a guest presentation by one of Georgia Tech's professors or local company executives. Table 1 provides the number of initiated members and initiation dates for each semester.

Table 1. Number of students initiated into PTS Nu

	Initiation Date	**Members Initiated**
Fall 2012	November 28, 2012	28
Spring 2013	April 23, 2013	22

B. Chapter Activities

During the 2012-2013 academic school year, PTS Nu hosted many activities in addition to joint efforts with other campus organizations. The following events are presented by semester and organized in chronological order. Weekly executive meetings were held while initiates participated in biweekly

general meetings so these dates are not included in the timeline in the interest of space. A discussion about the structure of these meetings is presented at the end of the timeline.

Fall 2012

Pi Tau Sigma Executive Dinner: 8/22/12

All of the executive officers of the Nu Chapter for this semester were introduced to one another at this dinner. For the occasion, the officers chose to meet at Moe's BBQ. After enjoying the meal, the officers conducted a series of discussions for setting preliminary goals and event planning for the semester.

General Meeting and Pizza Night: 8/29/12

PTS Nu began the semester immediately with pizza night and an opening meeting for all PTS members. The main purpose of this meeting was to introduce new events that would be pursued during the semester. In addition, the officers discussed changes to the meeting structure of PTS Nu so that existing members can interact more directly with initiates. Photo 1 shows a candid shot of members during a discussion.

Photo 1. Members trading ideas for new PTS goals.

Pi Tau Sigma Workshop Night: 9/5/12

This event was designed for current members of PTS, where members were divided into groups to discuss PTS-related events. The goal was to allow these members to reintroduce themselves to previously initiated students and to provide thoughts and suggestions relating to PTS events, specifically volunteer activities, company information sessions, factory tours, and a PTS career fair.

Pi Tau Sigma Information Sessions: 9/6/12, 9/7/12, and 9/12/12

The information sessions are for qualified mechanical engineering students who are interested in joining the PTS community. Multiple dates were chosen in order to allow flexibility among students with unrelenting academic schedules. Food was provided at all sessions, and executive officers discussed the motivation for joining such an esteemed organization and the benefits as a member. In addition, the students were introduced to the initiation process so that they are made aware of the expected level of commitment for joining PTS.

United Technologies Company (UTC) Information Session: 9/12/12

PTS hosted a speaker from UTC, who was an executive in the Sikorsky division. Members

prepared their resumes for the executive after his presentation about UTC. Food and beverages were provided during the event.

Department of Mechanical Engineering Ice Cream Social: 9/21/12

The Woodruff School of Mechanical Engineering hosted an ice cream social event for all college students. Pi Tau Sigma was asked to set up a table and present its organization to students in the department.

PTS Bent Key Polishing Party: 10/10/12 and 10/26/12

The "party" was designed for all initiates who wanted to share their polishing vigor with other initiates. We worked with members of Georgia Tech's Maker's Club to provide us with dremel tools and sandpaper for the initiates. It was an event that lasted for several hours. Several PTS executives were there to assist the initiates with their polishing. Pizza and drinks were provided.

Teach for America 10/17/12

PTS Nu invited a representative from Teach for America to talk to chapter members about the opportunities engineering graduates can find in their teaching program. Teach for America discussed with urgency the need for bright individuals with an engineering background. This event was designed as a Q&A session so that interested members can directly meet and discuss with the representative in an informal setting.

Mini 500 Race: 10/26/12

The Mini 500 Race is a Georgia Tech Homecoming tradition. Sponsored by the Ramblin' Reck Club, this tradition requires all participants to ride around campus on baby tricycles. PTS Nu participated in this event with several members and initiates to join this Tech tradition.

Kick Cancer's Butt Soccer Tournament: 11/10/12

Colleges Against Cancer hosted a soccer tournament on Georgia Tech's SAC fields by the Campus Recreational Center. PTS Nu formed a soccer team to participate in this event. All proceeds went to the American Cancer Society.

Officer Elections for Spring 2013: 11/12/12

There is an officer election every semester for PTS Nu. The Nu Chapter chose a semester-long, as opposed to a year-long commitment, because many upperclassmen have fluctuating schedules such as co-ops, internships, and graduation. The election process began with a short speech from each of the candidates, where competing members would be asked to leave the room during the speech and Q&A session for the individual.

Initiation Examination and Bent Key Judging: 11/20/12

This is the final deadline for all initiates to complete their initiation requirements. In addition, initiates must pass an examination that tests their knowledge of Pi Tau Sigma and its history. While the initiates took the exam, the officers examined and voted on the individual bent keys to determine if the key qualified as being "polished." Further details can be found in the Initiation Requirements under Section A of this report.

Initiation Ceremony and Banquet: 11/28/12

The ceremony and banquet are held every semester at the Georgia Tech Hotel and Conference Center. Dressed in business formal attire, all new initiates participated in Pi Tau Sigma's traditional ceremony, where they were fully conferred upon as members of Pi Tau Sigma by the Nu Chapter

president. Further details about the initiation ceremony can be found in the Initiation Requirements under Section A of this report. Upon conclusion of the ceremony, the banquet began, where the Nu Chapter invited Dr. Craig Forest as the guest speaker. The theme of the talk was innovation; Dr. Forest focused his discussions about the path for young engineers towards entrepreneurship and innovation and how his experiences as a mechanical engineering student led to his own businesses and research developments. Photo 2 shows the executive officers after the initiation ceremony.

Photo 2. Fall 2012 officers at the initiation ceremony.

Executive Transition Dinner: 12/5/12

A PTS Nu tradition, the officers from the current semester meet with the newly elected officers meet for a dinner social before the week of final exams, where the new officers have the opportunity to ask any questions or suggestions for their new role. This transition dinner took place at Moe's Southwest Grill.

Spring 2013

First Executive Meeting: 1/15/13

All of the new executives introduced themselves and discussed their goals and objectives for the semester. An agenda was planned and dates for upcoming events and meetings were set.

Pi Tau Sigma Information Sessions: 1/28/13 and 1/30/13

The information sessions are for qualified mechanical engineering students who are interested in joining the PTS community. Multiple dates were chosen in order to allow flexibility among students with unrelenting academic schedules. Food was provided at all sessions, and executive officers discussed the motivation for joining such an esteemed organization and the benefits as a member. In addition, the students were introduced to the initiation process so that they are made aware of the expected level of commitment for joining PTS.

Movie Night!: 2/19/13

The first social activity of the semester was a movie night at Georgia Tech's Student Center Theater. Drinks and pizza were provided. Members and initiates interacted before and after the movie presentation. Initiates and member pose before the movie in Photo 3.

Photo 3. A PTS member (right, center) and three other initiates prepare for the movie.

2013 National Convention: 2/22/13 - 2/24/13

PTS Nu sent two representatives, the president and vice president, to attend the 2013 National Convention at Ohio State University, as shown in Photo 4. The PTS Nu president was the recipient of the 2012-2013 Ed and Faye Griggs Scholarship.

Photo 4. PTS Nu's president (left) and vice president (right) pose in front of Ohio State University's Student Union on a very windy day.

10th Annual Georgia Tech Auto Show: 3/30/13

The largest fundraiser of the year, PTS Nu participates every year in the Georgia Tech Auto Show by setting up a booth for selling burgers and drinks. Only PTS was given permission to sell food-related products. With the help of members and initiates, the day's event resulted in roughly $700 in profit. Many customers can be seen in Photo 5 while members and initiates prepare the food.

Photo 5. PTS makes preparations to serve a long line of hungry customers.

Tech Wreck Night: 3/26/13

This past spring semester was the first time that PTS hosted an engineering outreach program of this caliber. With the financial support of Dr. Bill Wepfer, the Chair of the Woodruff School of Mechanical Engineering, PTS Nu hosted an outreach event to Georgia Tech freshmen located at the Student Center's recreational center. The evening began with a presentation on the multi-faceted opportunities in the field of mechanical engineering, research and internship opportunities, and projects that every student will experience at Georgia Tech. The presentation concluded with an introduction to Pi Tau Sigma and what they can expect as upperclassmen. Photos 6 and 7 show the engineering students who participated in this event.

Photo 6 Photo 7

Photo 6. Preparing the presentation while students obtain pizza and drinks.
Photo 7. PTS Nu's mentor chair presents "Why We Love ME."

In addition, the President of the Maker's Club was invited to present the many different types of tools and machines that are readily available to all students at the Invention Studio. Photo 8 was his setup to demonstrate the 3D printers.

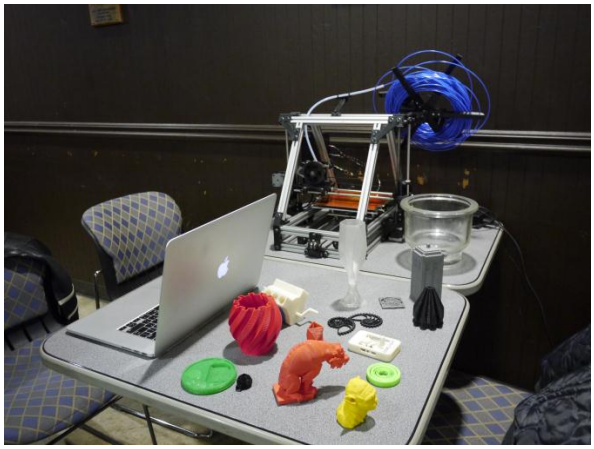

Photo 8. One of ten 3D printers at Georgia Tech's Invention Studio. The President of Maker's Club also discussed the laser cutters, waterjet, woodshop, and machining tools available to students.

Shell Dinner: 4/3/13

Because Shell sponsors PTS Nu every year, the Nu Chapter invited several of its members who were interested in joining other representatives of Tech organizations to join Shell in an evening of socializing and networking.

PTS Bent Key Polishing Party: 4/3/13 and 4/10/13

The "party" was designed for all initiates who wanted to share their polishing vigor with other initiates. We worked with members of Georgia Tech's Maker's Club to provide us with dremel tools and sandpaper for the initiates. It was an event that lasted for several hours. Several PTS executives were there to assist the initiates with their polishing. Pizza and drinks were provided.

Rocky Mountain Pizza Outing: 4/12/13

This was a social event for all members and initiates. Everyone met at the mechanical engineering building and walked to the Rocky Mountain restaurant, where all ordered food were funded by PTS Nu. Photo 9 shows all initiates and members who participated in this social event.

Photo 9. A candid shot of initiates and members.

Pi Mile 5K Road Race: 4/13/13

This Georgia Tech tradition allows runners to enjoy a 3.14159 mile course through Georgia Tech's campus. A group of PTS members participated in this tradition and were funded by PTS Nu.

National Robotics Week RIM Open House Volunteers: 4/10/13

PTS members helped the RoboJackets with RIM Open House. Volunteers assisted with setup, registration, and tours of the campus. This program was for high school students who were interested in the field of engineering and Georgia Tech.

Initiation Examination and Bent Key Judging: 4/15/13

This is the final deadline for all initiates to complete their initiation requirements. In addition, initiates must pass an examination that tests their knowledge of Pi Tau Sigma and its history. While the initiates took the exam, the officers examined and voted on the individual bent keys to determine if the key qualified as being "polished." Further details can be found in the Initiation Requirements under Section A of this report.

Georgia Power Company Information Session: 4/18/13

PTS hosted a plant engineer from Southern Company, who was a 2007 graduate from Georgia Tech. The guest speaker talked about his transition experience from Georgia Tech to real world applications and provided a Q&A session at the end.

Officer Elections for Fall 2013: 4/22/13

There is an officer election every semester within PTS Nu. The Nu Chapter chose a semester-long, as opposed to a year-long commitment, because many upperclassmen have fluctuating schedules such as co-ops, internships, and graduation. The election process began with a short speech from each of the candidates, where competing members would be asked to leave the room during the speech and Q&A session for the individual.

Initiation Ceremony and Banquet: 4/23/13

The ceremony and banquet are held every semester at the Georgia Tech Hotel and Conference Center. Dressed in business formal attire, all new initiates participated in Pi Tau Sigma's traditional ceremony, where they were fully conferred upon as members of Pi Tau Sigma by the Nu Chapter president. Further details about the initiation ceremony can be found in the Initiation Requirements under Section A of this report. Upon conclusion of the ceremony, the banquet began, where the Nu Chapter invited Dr. David Hu as the guest speaker. The theme of the talk was life choices and decisions as a college student. Dr. Hu presented his academic research and the decisions in his life that led to his path as a professor. Photo 10 shows the initiates and officers during the banquet ceremony.

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Photo 10. Executive officers (first three from the left) and newly inducted members during the banquet.

Executive Transition Dinner 4/26/13

A PTS Nu tradition, the officers from the current semester meet with the newly elected officers for a dinner social before the week of final exams, where the new officers will have the opportunity to ask any questions or suggestions for their new role. This transition dinner took place at The Real Chow Baby.

The following information sessions were not organized by PTS, but each of these companies specifically invited the members of the Nu Chapter to participate in their companies' presentations:

Abbott Information: 9/20/12
Alliance: 9/24/12
Weatherford International: 10/1/12
Pratt & Whitney: 1/17/13
Bechtel Corporation: 1/23/13
JP Morgan Technology: 2/6/13

Structure of Meetings

Executive Meetings:

Meeting agenda consisted of the following topics:

- General announcements
- Updates from each officer/assignment of new tasks
- Final preparations for upcoming events
- Planning for events several weeks in advance (dependent on size of event)
- Review of events from the previous week: Discussed results, things that worked, things that could have been improved, etc. Recorded and saved the discussion for future use
- Miscellaneous discussions or thoughts

General/Initiate Meetings:

- General announcements
- Discussion on upcoming events and necessary setup
- Initiate presentations
- Miscellaneous discussions or thoughts