

Pi Tau Sigma

Mechanical Engineering Honor Society

Leadership



Service

Integrity

California Pi Omega Chapter

Pi Tau Sigma

Honorary Mechanical Engineering Society



Pi Tau Sigma is the International Mechanical Engineering Honor Society. The concept of Pi Tau Sigma was initiated simultaneously at the University of Illinois and at the University of Wisconsin in 1915; these two schools officially formed Pi Tau Sigma in 1916. Our California Pi Omega chapter was founded in 1949 and continues to be a source of leadership development, engineering ideals, and networking opportunities.

The eligibility for membership is extended toward the top third of the senior class in the Mechanical Engineering Department and the top fourth of the junior class, as determined by GPA and number of completed units. Congratulations on your accomplishment!

Some of the many reasons to join Pi Tau Sigma are: it is a noteworthy achievement that can be mentioned on your resume, it will give you the chance to develop closer ties with professors, it will give you access to the Pi Tau Sigma list of research opportunities, and it will help you to gain contacts in industry. Pi Tau Sigma is also a great way to meet other ME students through both pledge and member events. But the most important reason why you should join is for the experiences you will share with your peers.

Join us this semester as we promote the study
and profession of Mechanical Engineering!
And don't forget to have FUN!

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Pledge Requirements

The Pi Tau Sigma pledging process has been carefully formulated to develop not only your engineering skills, but also to make you a responsible member of the community and an active participant in our group's undertakings. Therefore, before you can be initiated as an active member, you must complete **62 points** of requirements. The point values of the following activities are indicated by the bracketed numbers.

Required Events – Attend **ALL** events:

- 10/01 Pledge Barbeque [5]
- 10/12 General Meeting 1 [5]
- 10/26 General Meeting 2 [5]
- 11/16 General Meeting 3 [5]
- 12/02 Initiation [5]
- TBD Big/Little Sibling Event [1]

Outreach – Accumulate **10** points:

- 10/14 SWE Parent Program [5]
- 10/21 SWE Engineering Day/Halloween [5]
- 10/28 The Berkeley Project [10]
- 11/11 SWE Science Saturdays [5]
- TBD UC Berkeley Food Pantry [5]
- TBD Challah for Hunger (Bread Braiding) [5]

Social Activities – Accumulate **15** points:

Please **RSVP to all events on PTS website** before attending. Dates are subject to change, website is the official source.

- 10/12 Post GM Yogurt Park Run [5]
- 10/13 Bowling [5]
- 10/14 Ice Skating [5]
- 10/26 Post GM Menchie's Run [5]
- 11/02 Basketball @ RSF [5]
- 11/07 Corn Maze [5]
- 11/14 Board Game Night [5]
- 11/16 Post GM In-N-Out Run [5]
- 11/28 Dodgeball [5]

Pledge Project – **7** points:

- Submission of concept sketches at GM1 [1]
- CAD model or low fidelity prototype at GM2 [1]
- Evidence of testing and/or final prototype at GM3 [1]
- Clearing project challenge on initiation day [4]

Student Services (repeatable for points) – **2** points:

- Perform 2 hours of tutoring services on behalf of PTS [2]

Required Submissions – **2** points:

- Resume [1]
 - Resumes can be uploaded to your account on the PTS website
 - Make sure all resumes are in a PDF format
 - Resumes must be uploaded by GM3
- Three Electronic Copies of Exams [1]
 - Mechanical Engineering curriculum; Preferably with solutions
 - Email to pts.studentrelations@gmail.com

Dues – requirement to become a member (pay to the Treasurer):

- \$95 total for lifetime membership, nonrefundable, make checks payable to "PTS-ASUC"
- 1st portion (\$45) due by GM1
- 2nd portion (\$50) due by GM2

Officers – Fall 2017

President	Lua Varner	lua@berkeley.edu
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Questionnaire

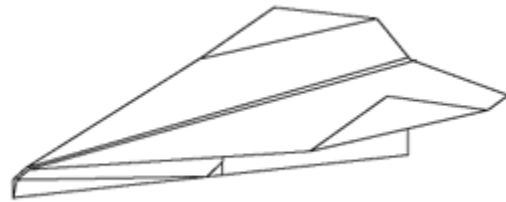
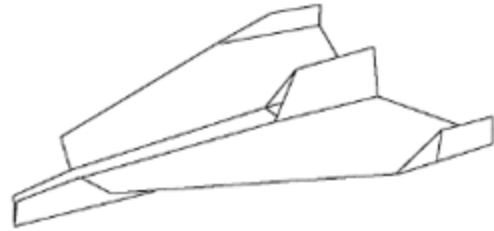
Name: _____

1. What are the core values of PTS?
2. Who is our chapter's faculty advisor?
3. On what date did PTS become a national honor society?
4. On what date was our chapter given its charter?
5. Who is the current National President?
6. Who is the current Western Regional Vice-President?
7. When and where was Volume 1, No. 1 of *The Condenser* published?
8. Who was the first editor of *The Condenser*?
9. What are the two awards given to PTS chapters at the national convention?
10. What are the official PTS colors?

Pledge Project: Aerial Vehicles

OVERVIEW

As a part of your initiation into ΠΤΣ, you will need to demonstrate your technical ability and engineering ingenuity through the construction of a rudimentary aerial vehicle.



PROJECT DESCRIPTION

You will be forming groups of 3 people, in an effort to build an aircraft that can stay aloft continuously for a full 15 seconds. A bonus point will be awarded for each second beyond the 15 seconds that the vehicle remains airborne. There are no limits on the dimensions of the aircraft, aside from the cost constraint (see below). You will have access to basic materials, ie: cardboard, tape, glue, rubber bands, popsicle sticks, etc (consider whatever you may have for an elementary school arts and crafts class). Vehicle will be launched from ~6 feet off the ground.

There are certain safety requirements however. Firstly, there can be no sharp objects of any kind. Secondly, the sum total material cost for your object shouldn't exceed \$10 (again use your ingenuity). Thirdly, use common sense when it comes to safety, if you think anything may not be safe, please don't do it, and if you have questions, please don't hesitate to ask us.

MATERIALS

All materials should be readily available at local hardware stores – cardboard, tape, and glue are all your best friends! No pre-packaged kits or pre-built models allowed! Go nuts!

REQUIREMENTS

To be initiated as an official member of PTS you must meet the requirements listed below.

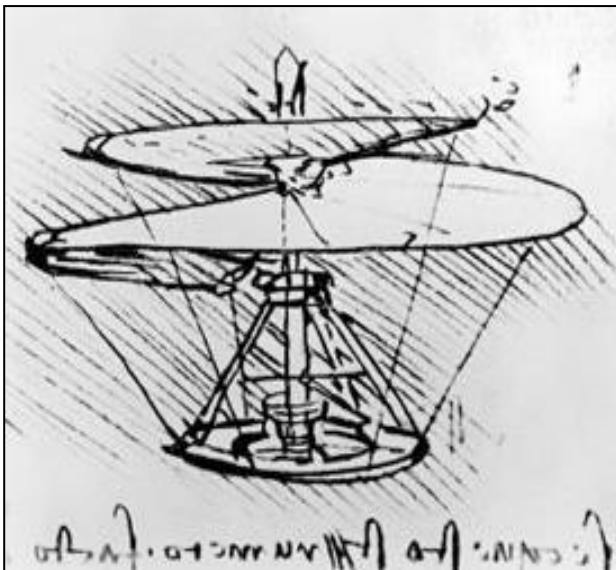
- General Meeting 1 (10/12): A draft, sketch, or pitch of your idea.
- General Meeting 2 (10/26): A bill of materials and CAD Model
- General Meeting 3 (11/16): A working prototype of your invention.
- Initiation: {Bring you project and hope that it works!!}

You must meet up with your partners to work on the project together. We want to see your teamwork! There will be consequences if you do not meet a checkpoint and did not let us know ahead of time. On the day of initiation, you will be evaluated on your design, results, and teamwork. Additional awards may be given to outstanding teams.

RESTRICTIONS

For safety reasons, we will be restricting the use of combustible and hazardous materials. If you are planning to do anything that is potentially dangerous, talk to us first. We want to make sure everyone is safe during the competition. Make sure your device is not pointed at anyone at all times.

CONTACT INFORMATION



Michael White is in charge of pledge projects this semester so please turn in your work at the General Meetings or email it to msteckwhite@berkeley.edu. Send an email if you have any questions or concerns. Good luck!