

Welcome to Tau Beta Pi The Engineering Honor Society Fall 2024

Fellow classmates and colleagues,

Congratulations on your outstanding academic achievements! Your drive to succeed in scholarship has made you one of the top performers of your class, and earned you an invite to Tau Beta Pi, the Engineering Honor Society!

Tau Beta Pi (TBP) is the oldest engineering honor society in the United States that recognizes and honors engineering students who have demonstrated distinguished scholarship and exemplary character. It is the second oldest collegiate honor society in the country, and the only one that represents the entire engineering profession. Founded in 1885 at Lehigh University by Professor Edward H. Williams Jr, TBP has grown leaps and bounds to 255 active collegiate chapters across the United States and Puerto Rico, and has initiated over 600,000 members so far.

The Michigan Gamma chapter of Tau Beta Pi was founded at the University of Michigan, Ann Arbor in 1906, and has since grown to be the second largest TBP chapter. Michigan Gamma brings together the great minds of the diverse engineering fields in the College of Engineering, and has initiated over 10,000 members to-date, including notable personalities like American astronaut Edward H. White II, and Google co-founder and CEO Larry Page. Michigan Gamma is also one of the most active TBP chapters, organizing over 100 service, social, and professional development events each semester. Some of our notable events include co-hosting the Fall SWE/TBP Career Fair which is one of the largest academic career fairs in the country, and Cub Scouts Day where we help local Cub Scouts earn their Engineering Pin by organizing various engaging modules, such as the famed Egg Drop Project. We also offer free one-on-one tutoring, and organize fun social and inter-society events, all aimed to bring a strong community that fosters academic excellence, professional and personal integrity, and a spirit of liberal culture in the field of engineering.

By participating in Tau Beta Pi, you will have the opportunity to meet fantastic peers from across the field of engineering who, like yourselves, are driven towards achieving academic excellence and enthusiastic to engage with the community. In this first general meeting, you will learn of the various benefits that come from being a member of TBP, including opportunities for community service, networking, professional development, scholarship and leadership. You will also learn of the requirements to be completed in order to gain membership into TBP—and though they may seem daunting at first, you can be assured that we are here to help you achieve these goals. Included in this packet is the information you will need in order to elect into TBP. If you have any questions, please do not hesitate to ask!

We hope you will choose to elect into membership for Tau Beta Pi. And remember—membership in Tau Beta Pi is lifelong, so once a member, always a member!

Abdur-Raheem Al-Hallak Graduate Student Vice President (GVP) Tau Beta Pi, MI-G tbp.gradvicepresident@umich.edu



Graduate Electee Packet — Fall 2024 Tau Beta Pi, MI-G

Make sure your packet has the following items:

- 1. Information Sheet
- 2. Graduate Electee Requirements
- 3. Service Project Descriptions
- 4. Character Evaluation
- 5. Graduate Electee Checklist
- 6. Graduate Electee Advisor Form
- 7. Minors on Campus Policy

If you are missing something, please stop by the office (1226 EECS, also known as the Bullpen) or visit the Electee Resources page on the website (tbp.engin.umich.edu) for a PDF version of this document. Also, feel free to contact the Graduate Student Vice President (tbp.gradvicepresident@umich.edu). **Sign up for interviews** and **create a website profile at** tbp.engin.umich.edu.

Officer Chats — Fall 2024

Please come visit us during our Officer Chats located in the Bullpen (1226 EECS). We can answer any questions you have and help you with your electing process. You can see any updates to the Officer Chats schedule at tbpmig.org/oh. The schedule for Officer Chats is as follows:

Executive Team	Wednesday	4:00 pm – 6:00 pm
Chapter Team	Tuesday Wednesday	11:30 am – 12:30 pm 3:00 pm – 4:00 pm
Events Team	Thursday Friday	2:00 pm – 3:00 pm 2:30 pm – 3:30 pm



Information Sheet — Fall 2024 Tau Beta Pi, MI-G

Important Dates

Date	Event	Time	Location
Sept 3	First General	6:30 pm	1013 DOW
Sept 18	Interviews	By Appointment	1120 DUDE
Sept 19	Interviews	By Appointment	1120 DUDE
Sept 20	Interviews	By Appointment	1120 DUDE
Sept 17	Second General	6:30 pm	1610 IOE
Sept 24	New Initiatives I	6:30 pm	1013 DOW
Oct 8	Third General	6:30 pm	1610 IOE
Oct 22	New Initiatives II	6:30 pm	1013 DOW
Nov 5	Fourth General	6:30 pm	1610 IOE
Nov 12	New Initiatives III	6:30 pm	1013 DOW
Nov 19	Elections	6:30 pm	1610 IOE
Dec 3**	Fifth General	6:30 pm	1610 IOE
Dec 7	Initiation	3:00 pm	1500 EECS
Dec 7	Banquet	6:00 pm	Stonebridge***

^{*} Interviews will take place in the Duderstadt conference rooms $1120\mathrm{B}$ and $1120\mathrm{D}$

General Information

TBP Office 1226 EECS

Email

tbp.officers@umich.edu

Website

tbp.engin.umich.edu

Officers

Executive Committee					
President	Hunter Muench	tbp.president			
Vice President	Karen Jin	tbp.vicepresident			
Graduate Student Vice President	Abdur-Raheem	tbp.gradvicepresident			
	Al-Hallak				
Secretary	Jennifer Wang	tbp.secretary			
Treasurer	Alex Li	tbp.treasurer			
External Vice President	Vance Kreider	tbp.externalvicepresident			
External Vice President	Ibrahim	tbp.externalvicepresident			
	Musaddequr				
	Rahman				
	Events Team				
Service Coordinator	Karis Hu	tbp.service			
Campus Outreach Officer	Sabrina Wong	tbp.campusoutreach			
Activities Officer	Paco Haas	tbp.activities			
Professional Development Officer	Maggie Robbins	tbp-corporate			
K-12 Outreach Officer	Dylan Stone	tbp.k12outreach			
K-12 Outreach Officer	Evelyn Lee	tbp.k12outreach			
	Chapter Team				
Chapter Development Officer	Aiden Ascioti	tbp.chapterdevelopment			
Membership Officer	Alyssa Fodale	tbp.membership			
Publicity Officer	Grace Yoon	tbp.publicity			
Historian	Arthur Yang	tbp.historian			

Executive Committee

Advisors

tbp-advisors@umich.edu

Leland Pierce	EECS	lep	Faculty Advisor
Kyle Lady	EECS	kylelady	Chief Advisor
Jacob Miller	ChE	millerjv	Alumnus Advisor
Kevin Masel	MSE	kmasel	Alumnus Advisor
Zachary Goldston	EECS	zwgold	Alumnus Advisor
David Martel	BME	damartel	Alumnus Advisor
Ranadeep Mitra	EECS	ranadeep	Alumnus Advisor
Michael Benson	EECS	mlbenson	Graduate Student Advisor
Kate Giammalvo	CEE	kgiamm	Graduate Student Advisor
Drew Boughton	ME	drbought	Graduate Student Advisor

^{**} Deadline to complete all electee requirements

^{***} Stonebridge Golf Club, 1825 Clubhouse Dr, Ann Arbor, MI 48108



Graduate Electee Requirements — Fall 2024 Tau Beta Pi, MI-G

The following is a detailed list of the requirements involved in the TBP electee process. Later in this packet you will also find a quick checklist that summarizes the important deadlines mentioned here. Please note the dates of the meeting and requirements on your calendar.

Create a Profile on the website by Sept 16: In order to successfully elect in to TBP, you must first create a profile on the website (tbp.engin.umich.edu), as it will allow you to sign up for events, receive important notifications, and track your progress throughout the semester. More step-by-step information on navigating the website will be provided to you via email, but briefly, you can use the "Event List" link under the "Calendar" Menu to sign up for events and the "Track my Progress" link under the "Membership" menu to keep an eye on which requirements you have completed.

I. REQUIRED MEETINGS

Attend all the General Meetings (5), Elections (1) and Initiation (1). All meetings (except Initiation) will begin at 6:30 pm (check the INFORMATION SHEET section of this packet for dates and venue). If you are unable to attend one or more of the General Meetings, please inform the Graduate Vice President, look over a copy of the meeting agenda at tbp.engin.umich.edu, and make up for the missed meeting by completing an extra hour of service, social, or professional development. Attendance at Elections cannot be made up by extra hours, so if you cannot make it, please contact the Graduate Vice President. Attendance at Initiation is required by the national organization to become a member of Tau Beta Pi. If you have an unavoidable conflict, please inform the Graduate Vice President ASAP! Though not required, you are welcome (and encouraged) to attend New Initiatives Meetings—these meetings will count towards service hours.

II. TEN SERVICE HOURS

Complete at least TEN* hours of service projects before Dec 3. Service events are scheduled via the website (tbp.engin.umich.edu), and signing up is a commitment to go! Hours will only be provided after attendance at the event is confirmed. If you are unable to attend an event you have signed up for, you must drop your sign-up at least 24 hours in advance. We recommend making sure the website accurately displays what you have completed. If not, please contact the website officer (tbp.website@umich.edu).

*At least FIVE of these service hours must be completed before Oct 29.

III. TWO SOCIAL EVENTS

Complete at least TWO* social events before Dec 3. Social events include Happy Hours, ice cream socials, hikes, and game nights to name a few. At least ONE of these socials MUST be a Grad Social. The Graduate Vice President, Graduate Student Activities Chair(s), and others will be scheduling a number of Grad Socials this semester, possibly including movie nights and lunch/dinner outings. If you have an idea for a Grad event, please contact the Graduate Vice President.

*At least ONE of these social events must be completed before Oct 29.

IV. TWO GRADUATE ELECTEE TEAM ACTIVITIES

Attend at least TWO* Graduate Electee Team Activities before Dec 3. These activities will aim to serve as a peer mentor group for the electees, providing opportunities to interact with each other and other graduates active in TBP. The Graduate Vice President will be scheduling a number of Grad Electee Team Activities this semester with the Grad Electee Team Lead(s). More information on the schedule of these meetings will be provided later.

V. CHARACTER QUESTIONNAIRE & INTERVIEW

These tasks need to completed by Sept 16 at 11:59 pm.

- (a) Complete the online electee questionnaire regarding exemplary character.
 - The electee questionnaire can be found under Electee Resources on the website (tbp.engin.umich.edu).
- (b) Upload a copy of your resume.

Your resume needs to be submitted to your website profile.

(c) Sign up for ONE in-person interview on the website.

The in-person interview is designed to be a low pressure interaction with an active member that lasts about 25 minutes and starts no later than 5 minutes after the start time. **Interviews will be held between Sept 18 and Sept 20 so please ensure that you sign up for a slot by Sept 16.**

More information on the Electee Questionnaire and Interview can be found in the CHARACTER EVALUATION section of this packet.

VI. FORMS & PAPERWORK

- (a) Submit the following completed forms before Sept 16:
 - i. Graduate Electee Advisor Form (copy included in this packet)
 - ii. Online Graduate Education Form (OGEF)(http://tbp.engin.umich.edu/members/electees/submit_education_form)

If you are a PhD student, but will also be receiving a Master's degree along the way (check with your program's Graduate Coordinator!), please circle "Master's" in the "Graduate Electee Advisor Form" and list both Master's and PhD under the Degrees section of the OGEF.

(b) **Complete the Youth Protection Training by Sept 17, 2024**. Please see the "MINORS ON CAMPUS POLICY" section of this packet for more details.

VII. MEMBERSHIP DUES

Pay the membership fee of \$100 to the Treasurer (Alex Li) before Dec 3.

This is a one-time fee to be a member of Tau Beta Pi that pays for electee supplies, the banquet, your bent, certificates, your lifelong membership, etc. You can turn it in at a meeting or to Alex Li during office hours via cheques (made out to Tau Beta Pi), cash, or virtual wallets. Payment is preferred via Venmo or PayPal. Additional information will be provided by the Treasurer later. If the fee poses a significant financial burden, please reach out to the Graduate Vice President for more information.

Remember, this is only what you *have* to do — there are no limits on what you can do! In the end, TBP is what you make of it — the more your give, the more you get out of it!



Service Project Descriptions — Fall 2024 Tau Beta Pi, MI-G

The following projects and descriptions are examples of some of the service projects that our chapter has carried out in the past. The complete list of service projects that will be done this semester is uncertain due to the constantly evolving opportunities our members discover. However, this list should give you a good sense of the different types of service projects that we undertake. If you see an event that you would like to participate in that has not been scheduled, you may also take the lead on it yourself. This semester is a great time to have creative ideas and take advantage of TBP resources for service events. Also, if we have a large amount of electees and general motivation to do larger scale community service, we have a community outreach plan set up that consistes of a lot of groundwork/direct interaction with the Michigan/Ann Arbor community. If you are interested in any of this please contact Karis Hu (tbp.service@umich.edu); it is never too early to start getting involved in leadership. Note that the list below is only a taste of the service projects we have carried out.

Ann Arbor Natural Area Preservation Stewardship Workdays: Ann Arbor Natural Area Preservation (NAP) is a section of the Ann Arbor Government that specializes in the preservation of public parks and nature reserves. NAP hosts weekend Stewardship Workdays that welcome groups of volunteers to help remove invasive plant species to preserve biodiversity. These events will become more frequent as the weather improves.

Campus Outreach Events: TBP organizes various tutoring opportunities for students within and outside the University of Michigan, hosts Breakfast Parties and Hot Chocolate Outreach Programs. Please check the website for more information.

Cub Scouts Day: Cub Scouts Engineering Day is a TBP-organized event for local Cub Scouts troops to receive their engineering badges. Activities include bridge building, egg drop, circuits, and floor plan. Volunteers are needed to help run these stations and to lead groups of Cub Scouts through the stations

Knitwits: Knitwits helps the less fortunate during the cold winters by creating warm clothes from donated material. We tie together scraps of fleece to make blankets for the homeless here in Ann Arbor. No experience is necessary; instructions and materials all provided!

Merit Badge Day: At Merit Badge Day, Scouts will explore the world of engineering and earn their Digital Technology, Programming, Electronics and Engineering Merit Badges. Scouts will learn about programming and engineering in a fun environment through multiple activities, including developing programs on an Arduino and designing simple websites, as well as learning about important topics in engineering. Scouts will learn from engineering students across several disciplines, and learn more about what it means to be an engineer.

MindSET: MindSET is a STEM education initiative started by TBP, aimed at engaging K-12 students in science and mathematics through hands-on, design-based learning activities, and mentoring from current engineering students. The program is designed around learn-design-build-test modules covering topics in physics, chemistry, and mathematics, along with their engineering applications such as bridges, circuits, and water rockets. The design-build activities involve groups of 4–5 school students working together. MindSET modules are organized on Saturday mornings from 9:00 am to 12:00 pm. Each module is unique in a given semester, but may repeat across semesters.

For more information, see https://tbp.engin.umich.edu/outreach/mindset/

University of Michigan Science Olympiad: University of Michigan Science Olympiad (UMSO) provides an excellent opportunity for both middle school and high school science to help grade and supervise events.

Zooniverse: Zooniverse is a completely virtual service opportunity that sees volunteers classifying elements for large-scale data sets. Topics include cosmology, biology, and history to name a few.



Character Evaluation — Fall 2024 Tau Beta Pi, MI-G

Exemplary character is one of the requisites for membership in Tau Beta Pi. In addition to being active members of the engineering community, Tau Beta Pi members must meet the **highest standards of moral character**. Our chapter will assess your character through written essays and an interview.

Electee Interview Questionnaire:

The first component of the character assessment in Tau Beta Pi is the Electee Interview Questionnaire. You will be required to complete a questionnaire with a couple fun questions, a few short answer questions, and one essay question. Please note that this questionnaire (and a copy of your resume) are due by **Sept 16** by submitting them through the website. The questionnaire can be found under Members \rightarrow Electee Resources while your resume should be submitted to your website profile. Submit your **essay and resume** by **Sept 16**.

Some of the short answer will provide you with the opportunity to share a part of your personality with us. Others will ask for your opinion on topics related to academic integrity. While not a direct question on character, these question will allow us to better understand you, your thinking, and grasp your personal character.

As an organization that stresses the importance of exemplary character in our electees and our active members, the essay is a **crucial** part of character assessment. This (one page) essay is an open-ended assignment, and we encourage you to get creative with your submission. Nevertheless, exemplary character is not an arbitrary concept, and we are looking for specific evidence that you know what this important quality means. Tau Beta Pi members should meet the highest standard of moral character. The quotes on the following page may help inspire you on the subject of exemplary character, but do not limit yourself to those ideas.

The questionnaire can be found and completed under **Members** \rightarrow **Electee Resources at tbp.engin.umich.edu**. Be ready to discuss your answers during your interview.

Interviews:

The interview is the most important part of character assessment. Interviews will be held on Sept 18, Sept 19, and Sept 20 in the Duderstadt, rooms 1120B and 1120D. You must sign up for one interview slot. Each interview should last about 25 minutes and will start no later than 5 minutes after the scheduled start time (to allow for travel from classes). Dress is business casual — you do not need to wear a suit, but should dress professionally. While the interview is intended to be low-pressure, electees can be denied membership on the basis of a negative interview, so take the process seriously. Interviewers will review the resume and the answers to the Electee Interview Questionnaire you submitted by **Sept 16**. Sign up for a graduate electee interview on the website (tbp.engin.umich.edu).

Interview Dates: Sept 18, Sept 19, Sept 20: 5:00 pm – 9:00 pm

Location: 1120 DUDE

Requirements: Dress is business casual

Sign up for a graduate electee interview under "Events" at tbp.engin.umich.edu.

Submit your questionnaire answers under Members

Electee Resources at tbp.engin.umich.edu

and your resume to your **website profile** by Sept 16.

If you have any questions or scheduling issues, please contact the GVP (tbp.gradvicepresident@umich.edu).

Quotes about Character

"Character, not circumstance, makes the person."

- Booker T. Washington, American educator and civil rights activist (1856–1915)

"Character is like a tree and reputation like its shadow. The shadow is what we think of it; the tree is the real thing."

- Abraham Lincoln, 16th U.S. president (1809–1865)

"It is with trifles, and when he is off guard, that a man best reveals his character."

- Arthur Schopenhauer, German philosopher (1788–1860)

"Weakness of attitude becomes weakness of character."

- Albert Einstein, Swiss-American mathematician and physicist (1879–1955)

"Character cannot be developed in ease and quiet. Only through experience of trial and suffering can the soul be strengthened, vision cleared, ambition inspired, and success achieved."

- Helen Keller, American author, activist and lecturer (1880–1968)

"When the character of a man is not clear to you, look at his friends."

- Japanese Proverb

"The right way is not always the popular and easy way. Standing for right when it is unpopular is a true test of moral character."

- Margaret Chase Smith, American Senator (1897–1995)

"The best index to a person's character is (a) how he treats people who can't do him any good, and (b) how he treats people who can't fight back."

– Abigail Van Buren, American columnist (1918–2013)



Graduate Electee Checklist — Fall 2024 Tau Beta Pi, MI-G

Use this quick checklist to stay organized with all the requirements and deadlines for the TBP electing process!

Done	Due Date	Requirement	
	Sept 3	First General Meeting**	
	Sept 16	Create profile on website	
	Sept 16	Online Electee Questionnaire	
	Sept 16	Sign-up for interview (Sept 18, Sept 19, Sept 20)	
	Sept 16	Submit Advisor and OGEF forms	
	Sept 17	Second General Meeting**	
	Sept 17	UofM Background Check	
	Sept 18-Sept 20	Complete Interview	
	Oct 1	One grad electee team meeting	
	Oct 1	3 service hours total (recommended)	
	Oct 8	Third General Meeting**	
	Oct 29	≥ 5 service total hours (required)	
	Oct 29	≥ 1 social event total (required)	
	Nov 5	Fourth General Meeting**	
	Nov 19	Elections**	
	Dec 3	Fifth General Meeting**	
	Dec 3	Complete ≥ 10 service hours total	
	Dec 3	Complete ≥ 2 social hours total (≥ 1 grad social)	
	Dec 3	Attend ≥ 2 grad electee team meetings	
	Dec 3	Pay \$100 dues to the Treasurer	
	Dec 7	Initiation** and Banquet	

 $^{**} indicates REQUIRED \, MEETING. \, If you cannot attend a meeting, please inform the Graduate \, Vice \, President \, (tbp.gradvicepresident@umich.edu).$



То:	Abdur-Raheem A Graduate Student Tau Beta Pi – Micl 1226 EECS	Vice President		
From:	(Advisor's Name))		
Re:	Tau Beta Pi Candi	dacy of		
	(Applicant's Nam	ie)		
I certify that the above induction (Dec 7) at least	=	in Engineering at the Uni	iversity of Michigan has completed or will	complete prior to
	Master's	Ph.D.	(please circle one)	
	cluding both courseworl Pi — The Engineering H	=	oon the student's academic performance, I	recommend their
(Advisor's S	Signature)			

Return this form to Abdur-Raheem Al-Hallak, MI-G Graduate Student Vice President,

at 1226 EECS, or via email (tbp.gradvicepresident@umich.edu) before Sept 16.



Minors on Campus Policy — Fall 2024 Tau Beta Pi, MI-G

The University of Michigan, Ann Arbor Public Schools, and the Boy Scouts of America require anyone volunteering with children to complete background checks. This means that in order for anyone to volunteer and interact in any way with youth at TBP Events, they must complete a background check form. Before you can complete the background check, you need to opt-in to the process by filling out the background check opt-in form (https://tbpmig.org/opt-in). Please do so as soon as you can. After you do so, the K-12 officers will submit yout name to receive a background check, and in the days after, you will receive an email from a third-party system to complete a background check form (do remember to check your spam). You must submit a screenshot of the end of the survey to K-12 officers (tbp.k12outreach@umich.edu) by Sept 17in order to volunteer with youth at MindSET, Cub Scout Day, Merit Badge Day or Major Fairs. You will not receive any confirmation email about a successful background check, emails are sent only when something is flagged. If you are unable or unwilling to complete the form and submit to the background check, participation at K-12 events will be limited to roles that ensure non-interaction with youth.

The University of Michigan requires that all individuals volunteering with minors also complete training. To fulfill this training requirement, Tau Beta Pi is requiring members to complete Youth Protection Training (YPT), offered through the Boy Scouts of America. This training can be completed online, taking around an hour to complete at scouting.org/training/youth-protection. You will need to create an account before proceeding to take the training online, and after completing it, you must save your certificate as a PDF document and send it to the K-12 officers (tbp.k12outreach@umich.edu).

Submission of your YPT certificate, proving that you have completed the online training, should be completed by Sept 17. Upload the YPT certificate using the following link https://tbpmig.org/YPT

If you have any questions about the background check or training, or if you do not wish to complete the background check, please contact the K-12 officers (tbp.k12outreach@umich.edu).

To summarize, please have the following done by **Sept 17***:

- I. University of Michigan background check. **Take a screenshot** of the final page of the survey and send to tbp.k12outreach@umich.edu (you will not receive a confirmation email)
- II. Boys Scouts of America Youth Protection Training (YPT) at **scouting.org/training/youth-protection** and upload a certificate to *https*://tbpmig.org/YPT

*If you miss this deadline but still wish to participate in these events, you may contact the TBP Service Coordinator (tbp.service@umich.edu) to check if there is enough time to complete the background check prior to the event.

K-12 Event Dates are:

MindSET: Oct 6, Oct 27, Nov 17

Engineering Day: Nov 3 **Cub Scouts Day**: Nov 10

Merit Badge Days: Oct 20, Nov 24