

**Industrial and Manufacturing Engineering**  
**Mentoring Program Handbook**  
The Pennsylvania State University

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# Section 1 - Program Introduction and Overview

## Introduction

The objective of Penn State's Industrial and Manufacturing Engineering Mentoring Program is to facilitate a program that allows Penn State Industrial and Manufacturing Engineering (IME) alumni to accelerate the development of current Penn State IME students by sharing their talents, knowledge, experiences and skills.

Through participation in the mentoring program, both mentor(s) and student(s) agree to work together to facilitate an environment that encourages mutual personal and professional growth and expansion of skill sets via the two-way exchange of knowledge and ideas.

Success Measures of the program are:

- Increased skill set(s)
- Increased network
- Forward movement of protégé towards their career goals.

## Purpose of This Handbook

This handbook provides an overview of the mission and conduct of the IME Mentoring Program. It is intended to be a resource for mentors and students on initiating their participation in the program, conducting their interactions within the program, and, if desired, concluding their participation in the program.

## Program Description

### Mission:

The mission of the IME Mentoring Program is to facilitate the professional development of PSU IME students by providing them with a mentor who is a graduate of the Penn State IME department who shall provide guidance, counsel, and networking opportunities.

### Program Management:

**The Harold and Inge Marcus Department of Industrial and Manufacturing Engineering (IME), Penn State Industrial and Manufacturing Engineering Society (PSIMES) and the Penn State Chapter of the Institute of Industrial Engineers (IIE)** jointly sponsor the Industrial and Manufacturing Engineering (IME) Mentoring Program. The program provides students with opportunities to interact with industrial engineering alumni on a one-on-one basis and to receive advice and recommendations related to the academic and professional development of the student.

The mentoring program is administered by the **PSIMES Mentoring Committee**. The Mentoring committee is composed of volunteers from the PSIMES board. The Mentoring Committee is responsible for matching students and alumni mentors, soliciting feedback, and resolving any issues that arise related to the program.

## Participation and Eligibility

### Students:

All Penn State IME undergraduate and graduate students are eligible to participate in the program on a voluntary basis. The program is also open to freshman and sophomore students who are interested in IME, although if mentors are limited, juniors and seniors will be given priority in matching before underclass students. A one year commitment is required of students requesting to participate in the program.

### Mentors:

Alumni mentors are members of PSIMES and serve on a voluntary basis. Individuals who are not members of PSIMES may participate in the program as mentors if granted an exception by the IME department and the IME Mentoring board. Solicitation of mentors occurs annually, with the expectation that once a mentor volunteers, they will mentor the student through a minimum of the current school year.

## Roles and Responsibilities Overview

- Once the matches have been emailed to the mentors and protégés, **the mentor initiates contact with the student.** (Please read Expectations: Mentors section of this handbook for more details on timing and suggestions on contacting the student)
- **Students and mentors are expected to determine a method and frequency of communication that fits their needs and schedule.** It is recommended to communicate on a monthly basis, particularly in the beginning of the relationship. Establishing a schedule of meetings for the entire school year at the beginning of the relationship helps to ensure that not too much time passes between interactions.
- **The pair should also establish goals to work together toward achieving.** If either the mentor or the student finds the match to be less than ideal, it is his or her responsibility to contact the IME mentoring board at [psimesmentoring@psu.edu](mailto:psimesmentoring@psu.edu).
- **All pairs are also required to participate in 3 surveys throughout the school year** to inform the IME mentoring board on the status of the relationship.

# Section 2 – Mentoring Program Details

## What is Mentoring?

Professional mentoring is a cooperative and nurturing relationship between a more experienced business person, the Mentor, and a less experienced person – in this case the Penn State IME student. The person being mentored is sometimes called the Protégé.

The main purpose of the mentor relationship is to develop the student (protégé) in his/her chosen major to successfully navigate the remainder of their college experience and help prepare the student for a successful career. The mentor can provide a broad-based view, tempered with real life experiences gained from years of working in one or more industries. Mentoring can be a short cut to career success – it provides a safe, protected environment in which the student can learn and grow professionally.

The student (protégé) benefits from the mentor’s business experience and the valuable lessons learned over the years.

- **The mentor guides the protégé in developing skills, methods, and work habits.** Such skills as writing an effective letter, maintaining useful documentation, navigating professional politics, communicating ideas, and/or managing and completing complex projects may be addressed and encouraged in a non-threatening environment.
- **When major decisions or choices arise, the mentor can be an effective source of advice and encouragement, sharing seasoned judgement on the various choices available in a given situation.** A mentor is someone who can evaluate your skills, attributes and natural talents and help guide you in your career path.
- Mentoring spans all professions and industries. Although the relationship is directed at helping the student (protégé) succeed in his/her career through goal setting, business enrichment and network development, the ongoing, professional interaction often benefits both parties. **It is important for the mentor and the student (protégé) to have a clear understanding of what each party feels will work best for one another.**

Observe, listen and ask questions to understand the goals of the mentoring relationship. Maintain unconditional, positive regard for the mentor relationship – at all times. Mentors and students (protégés) should be supportive and non-judgmental of each other’s views, lifestyle and aspirations, which is paramount to the ultimate success of the relationship.

## Aspects of the Mentor/Student (Protégé) Relationship

### Level of Commitment

Frequency of contact is important in the mentor/student relationship to keep the learning process moving forward. Each new discussion with the mentor should include updates from the protégé on items the mentor recommended in a previous discussion. Some may want to meet in person, while for others, phone calls, emails or video chatting can serve the purpose. Whichever way you jointly decide to operate, it is advised that you should both be comfortable with the meeting mode and time commitment.

### Goal Setting

Working together to set goals can be pivotal.

- Talk about current issues, but also focus on short term and long term goals.
- Action steps need to be discussed on how to accomplish the goals and tasks along the way that will require additional attention in reaching them.
- Your strengths, weaknesses, and skills can be discussed while working together to help both sides of the relationship develop professionally.
- Make your goals “SMART” – Specific, Measurable, Actionable, Realistic, and Timely.

Questions to ask yourself as you begin to set goals include:

- What exactly do you want to change?
- How will your success be measured?
- When are the results expected?

To do this you’ll need to focus on precisely what requires changing. This could be anything from improving your resume writing skills, interviewing skills, listening skills to making better course selections, pros/cons of pursuing an advanced degree, expanding your network or leveraging your advisor better. Remember that goals might change as the mentoring relationship progresses, so you should build in flexibility.

It is important to balance achievability against reality. All mentoring relationships need a high degree of informality to function well and achieve the depth of trust and overall rapport that give you the opportunities to explore issues deeply and energetically.

## Expectations: Students – About being a protégé...

As a protégé, you have as much responsibility for making the arrangement work as the mentor. So, ask yourself:

- What am I prepared to put into the relationship?
- Can I step outside of my comfort zone for greater potential and growth?
- Do I know where to go if I have an issue with my mentor? (contact [psimesmentoring@psu.edu](mailto:psimesmentoring@psu.edu))

The relationship is primarily about your progress. Here are some pointers for a successful mentoring relationship:

- Open communication is the foundation of a productive student-mentor relationship.
- Students should be enthusiastic and assertive in communicating their individual interests and needs.
- One of the greatest ways in which a mentor may be an asset is by sharing real world work experiences. Students should take advantage of this asset by asking questions about the workplace and how best to prepare for specific work environments.
- Students may discuss a range of topics with mentors, from school work and career goals to extracurricular activities and relationships with other students, faculty and staff. However, remember that while mentors play many different roles throughout the relationship, the mentor is not a parent or counselor.
- Most importantly students must keep their commitments and remember that mentors have volunteered this time to be of service to them.

Making mentoring work is not just about finding a mentor with a certain position or status. There must be synergy and compatibility. Always look for similarities between you and your potential mentor. First, make a list of your answers to the following questions:

- What do I enjoy doing?
- What are my strengths? Weaknesses?
- Where would I like to see myself in the future? What does success look like for me?
- Who are my heroes or people I would like to emulate and why? (what sort of person would I find it easiest to build a relationship with)?
- What kind of skills would my ideal mentor have?
- What do I want from this relationship?
- How do I feel about a mentoring relationship with someone who is significantly different from me?

At the bottom of this list, write down a skill that you would like to improve upon. Wanting to improve your skills is within your power. You may want to build on skills you already have such as public speaking, research, or leadership skills. Or you may want to learn better organizational skills. How you want to improve is entirely up to you.

If you expect your mentor to make a commitment to assisting you, you must make a commitment to be active in the relationship. You reap what you sow as a protégé; if you are active in the relationship, then your mentor will

follow suit. Remember, mentors volunteer their time from an already busy schedule to help you achieve your goals. Since you are entering into a mentoring relationship, take it seriously, and know what is expected of you as a protégé.

- Be open to feedback
- Demonstrate a willingness to learn and grow
- Ask for advice, suggestions and opinions
- Listen, apply advice and commit to results
- Set a routine to meet with your mentor, but make every effort to honor your mentors gift of time and experience by being flexible around their available meeting times. Please do everything you can not to reschedule this valuable time with them.
- If you must miss a meeting, try to reschedule as soon as possible so you don't get behind on your goals.

### Best Practices: Mentoring Manners

1. **Come prepared to the meetings.** Have an idea of what you'd like to accomplish at each monthly meeting. Spend a little time before each meeting thinking about what you've accomplished, where your challenges are, and what you'd like to focus on today. Ask for what you need so that the mentor can focus on that. Take charge of your needs. (Fill out Protégé preparation form before each meeting. See sample in appendix)
2. **Do your homework.** If you've agreed to take a certain action based on your mentor's recommendations, please follow through. Little is more frustrating to a mentor than talking without action. Execute your plan of action.
3. **Defer to the Mentor's busy schedule.** Most mentors will try to coordinate schedules so that they are agreeable to you both. However, when in doubt, accommodate your schedule to theirs as much as possible.
4. **Ask about email/phone.** If your mentor doesn't specifically address whether they are open to emails and phone calls versus face to face meetings, ask what they can and cannot accommodate.
5. **Keep scheduled appointments.** Meeting with your mentor happens approximately once a month. Unless there is an emergency, don't reschedule the appointment.
6. **Maintain confidentiality.** What you work on and talk about is confidential. Growth and progress happens best when both parties feel free to speak freely, make mistakes and experiment. Even after your year together, we ask that you respect this.
7. **Keep a journal.** It's a good idea to keep a journal of mentoring meetings. It helps to keep you focused around your goals for the year, to remember what you discussed and are working on, to see how far you've come in the year, and to prepare for monthly meetings.

### Winding Down

It might appear strange to be discussing the "winding down" of a mentoring relationship; surely it ends when the protégé's outcomes are realized? In fact, the handling of this stage of the relationship requires as much, if not more care than any other stage of the mentoring process. Here are some pointers/steps to take when winding down:



- Set goals at the start. If and when those outcomes are achieved, you have a measure for the success of the mentoring relationship. Be focused!
- Realize that your mentor's time is valuable, expect that the relationship will scale down over time, gradually reducing contact. Be open to a limited relationship after the mentoring period is over, whatever this might look like.
- Prior to your last meeting, have a conversation with your mentor about your plans for ongoing development and set goals for yourself. Offer to check in with your mentor from time to time on progress. Be sure to clarify that this is your last meeting to provide closure and ensure that neither party is confused about the go forward plan.

Some practical steps to take in preparation to wrap up the mentoring relationship:

- Prepare for moving on a few months before the transition
- Review frequently what goals the relationship has reached
- Emphasize the mutual learning gained
- Be open about your feelings
- Think about how you will continue learning and career planning without regular input from your mentor.
- Think about becoming a mentor yourself, leveraging what you have learned in the process. It is good to give back part of what you have received.
- Celebrate the successes of the relationship.
- Agree on how and when you may want to keep in touch. **Many mentors and protégés continue on an informal basis and build friendships that can last a lifetime!**

## Expectations: Mentors

The five main tasks of a mentor are to establish a personal relationship, help the student to develop career skills, assist the student in obtaining resources, increase the student's abilities to interact with other social and cultural groups, and to encourage development in new field-related competencies.

Most importantly, the mentor must foster an environment of open communication. Regular face-to-face contact is best for developing the kind of relationship conducive to such communication; however, if that is not always possible, regular contact by telephone or e-mail will help to forge the necessary personal connections.

Mentors must keep in mind that students have different learning styles and personalities. As a result, they may need different kinds of support from their mentors. To develop a positive working relationship, the mentor should develop an understanding of the student's learning style and adjust accordingly.

**Please read the information in the "about being a protégé section"** to become informed on how the students are being guided into this relationship. Remember that for many, this is their first formal mentoring relationship

and often they are unsure how to act. Here are some specific instructions to help you get the mentoring relationship off on the right start:

- **The mentor is to initiate contact with the student within one week of receiving the matching email and should schedule the first discussion within two weeks.** Begin by introducing yourself, telling the student a little bit about you. In this first contact, be sure to:
  - Establish the communication place, time, and schedule.
  - Confirm phone and email addresses.
  - Set boundaries, if needed on times you are not available for phone calls.
- **At the first meeting/discussion:**
  - **Ask the student to tell you a little about themselves...**where are they from? what year are they in school? what made them choose Penn State? What made them choose industrial engineering? Do they know what type of industry they want to work in within the field? What are their hobbies? Are they involved in any sports/clubs?
  - **Tell the student similar things about yourself** finishing with a brief description of what you do and the company for which you work.
  - **Ask the student if they thought about specific goals for the relationship**
    - If they respond “yes”, discuss them.
    - If they respond, “no”, give them an assignment to think about some goals for the next discussion. Offer suggestions like whether they need help with their resume, course selection, interviewing skills, speaking skills, leadership skills, finding an internship, etc....
    - Questions to ask as you begin to set goals include:
      - What exactly does your protégé want to change?
      - How will success be measured?
      - Does your protégé have ideas on how they might achieve their goals, and are they setting their sights too high or too low?
      - When are the results expected?
      - What is the protégé’s level of commitment to the goals?
    - To set effective goals, remember to focus on precisely what they are trying to change or achieve. Remember also that goals might change as the mentoring relationship progresses, so you should build in flexibility.
    - It is important to balance achievability against reality. The level of formality can be dictated by the needs of the protégé. All mentoring relationships need a high degree of informality to function well and to achieve the depth of trust and overall rapport that gives the protégé opportunities to explore issues deeply and energetically.

## Networking

An equally important aspect of mentoring is teaching your protégé how to network and who to network with. The mentor becomes, in effect, the gateway to the business experts and resources his/her protégé will need. Frequently, the mentor provides the introduction, and in doing so, provides an endorsement and acceptance by other business people that the protégé would otherwise take years to achieve on his/her own.

## About being a mentor

Being a mentor is a very valuable experience. You will be able to share your industry knowledge and life experiences to truly help someone grow and progress through their college education and potentially in their career.

As a mentor, you will not only have the amazing feeling of contributing first hand to helping someone develop professionally, but you will also gain skills yourself. Especially for young mentors, a relationship with a protégé will allow you to practice your managerial skills and build professional networks in the business community. Mentoring will give you practice in various business activities from goal setting to crisis management.

Mentoring allows you to give back to the community and truly touch someone in an important aspect of his/her life – their career. Your guidance will be influential in helping that person succeed and grow, just as you have. Think back to any mentor or person of significant influence in your life and how grateful you are to that person for helping to steer you in the right direction. Now is your chance to guide someone else's path to establish a relationship of mutual respect and trust that encourages the protégé to grow, while offering encouragement to achieve goals and possibly reveal areas for further development.

It is important to let the protégé be the driver of desired outcomes, but you may need to probe and help him/her to define objectives. The best relationships usually involve a proactive protégé and a passive, yet reactive mentor. As a mentor wanting to provide your charge with an appropriate sense of direction, consider asking the following questions to your protégé:

- What do you want to become?
- What do you want to be different in your circumstances in 12 months?
- How do you want to feel about your school, work or yourself at that time?
- How will you know you have made progress?
- What will you do when you have made this transition? What else will it enable you to do?
- What specific help from me would be most useful?
- What's the next step for you?
- What are you willing to do?
- What do you most want for you?

Practical steps the mentor should take to manage the relationship include:

1. **Manage the agenda.** Take primary responsibility to decide the content, timing and direction of the discussion. Point the protégé towards specific goals and /or give strong advice or suggestions. Push the protégé to think about what they want to discuss before each meeting.
2. **Meet routinely.** You don't have to be rigid about when and where the mentoring takes place, but it's important to set time aside in your schedule to establish a routine.
3. **Encourage mutual appreciation.** Let the protégé know you're getting as much from the session as he/she is; it will maintain and encourage further open-ended discussion.

# Section 3 – Appendix

## Mentoring Process with timeline

Below is a summary of the key activities and milestones for student and mentor participants in the Industrial Engineering Mentoring Program.

<b>Action</b>	<b>Responsibility</b>	<b>Timing</b>
1. Solicitation of Mentors	PSIMES Mentoring Committee	July
2. Alumni mentor registration and submission of bio's	Penn State Industrial & Manufacturing Engineering <b>Alumni</b>	August
3. Student introduction to mentoring program	IME Department and PSIMES Board of Directors, IISE Student Chapter	Late August/Early Sept.
4. Student registration	<b>Student</b>	September
5. Students matched with mentors	Industrial & Manufacturing Engineering Mentoring Board	September
6. Mentoring Begins	<b>Mentor</b> Initiates first discussion	October
7. First Check-In survey sent to mentors/students	PSIMES board members send <b>Mentors and Students respond</b>	November
8. Mentoring Continues	Mentor and Student	Through May
9. Second Check-In Survey sent to Mentor/Students	PSIMES board members send <b>Mentors and Students respond</b>	January
10. Annual satisfaction surveys submitted	<b>Students and mentors</b>	April
11. Annual summary and evaluation of program	PSIMES board	May

## Reference Documents

The following documents are posted online to assist potential mentors and students.

### [Guidelines for Students](#)

A guide designed to assist students in developing and effectively utilizing the mentoring relationship. Includes sample questions students may ask in the early stages of the student-mentor relationship.

<http://www.ime.psu.edu/alumni/mentoring/student-roles-responsibilities.aspx>

### [Guidelines for Mentors](#)

Describes the role of a mentor and summarizes best practices employed in developing an effective student-mentor relationship. <http://www.ime.psu.edu/alumni/mentoring/mentor-roles-responsibilities.aspx>

### [Alumni-Student Mentoring Program Goals and Action Plans – Form and Guidelines](#)

A form used (optional) by students and mentors to 1) identify specific goals of the mentoring relationship and 2) detail an action plan to achieve those goals, including guidelines and examples.

<http://assets.engr.psu.edu/MNE/docs/Guidelines-ActionPlanning.pdf>