



**EDWARD P. FITTS DEPARTMENT OF
INDUSTRIAL AND SYSTEMS ENGINEERING**

Alumni-Student Mentoring Program Handbook

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Preface

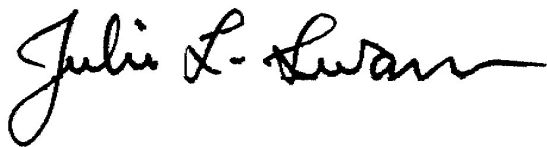
Dear ISE mentors and students,

Welcome to our NC State ISE Alumni-Student Mentoring Program. This program allows our students to learn from our experienced alumni while also giving our alumni a way to give back to the department. Please review this handbook in its entirety to understand how it works and what you can expect. We hope that this program will help both the students and their mentors learn and grow together throughout the academic year. If you have any questions, please contact academic advisor [Wendy Blue](mailto:Wendy.Blue@ncsu.edu) | wcblue@ncsu.edu | 919.515.5413.

Students, make sure that you take full advantage of this chance to ask questions and get advice as you make your way through the program. Mentors want to help you achieve your goals and prepare you for your professional future by guiding you in developing skills, methods and work habits.

Mentors, I hope you will take this opportunity to build long-lasting relationships with the next generation of ISE alumni. This program is a great way to meet potential employees and increase your connectivity with our department. Through mentoring, you'll guide your student's future and train them to be successful professionally. I hope that you will enjoy shaping the next generation of ISE alumni and continue to make your mark on our department!

Learn together, Wolfpack!



Julie L. Swann

Department Head

A. Doug Allison Distinguished Professor

Section 1 | Program Introduction and Overview

Introduction

The Edward P. Fitts Department of Industrial and Systems Engineering (ISE) Alumni-Student Mentoring Program (ASMP) allows ISE alumni to help develop current ISE students by sharing their talents, knowledge, experiences and skills.

By participating in the mentoring program, both mentors and students agree to work together to promote mutual personal and professional growth and expand skillsets by exchanging knowledge and ideas.

Success outcomes of the program are:

- Increased skill sets
- Increased network
- Forward movement of the student towards their career goals

Purpose of This Handbook

This handbook provides an overview of the mission and conduct of the ISE ASMP. It is a resource for helping mentors and students get started in the program, conduct their interactions within the program, and, if desired, conclude their participation in the program.

Program Description

The mission of the ISE ASMP is to help the professional development of ISE students by providing them with an alumni mentor. This mentor shall provide guidance, counsel and networking opportunities. The program centers on the dual goals of strengthening alumni connections with the ISE Department and placing students on the path to success.

Program Management

The program provides students with opportunities to interact with ISE alumni on a one-on-one basis and receive advice and recommendations related to their academic and professional development.

The mentoring program's administrator is Wendy Blue, Academic Advisor, wcblue@ncsu.edu.

Participation and Eligibility

Students

All full-time enrolled ISE students are eligible to participate in the program voluntarily. If mentors are limited, sophomores and juniors get priority in matching before other underclass students. Students must make a one-year commitment to participate in the program.

Mentors

Alumni mentors are graduates of the NC State ISE department and serve voluntarily. The 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 mentors and students receive their email confirming their match, the student is responsible for initiating contact with the mentor. Please read [Expectations: Mentors](#) in this handbook for more details on timing and suggestions on contacting the student
- Students and mentors need to determine a method and frequency of communication that fits their needs and schedule. They are encouraged to communicate every month, particularly at the beginning of the relationship. Establishing a meeting schedule for the entire school year at the beginning of the relationship ensures that not too much time passes between interactions.
- The pair should also establish goals to work together toward achieving. An example template is provided in the appendix of this document to help that work. If either the mentor or the student finds the match to be less than ideal, it is his or her responsibility to contact Wendy Blue, wcbblue@ncsu.edu.
- All pairs are required to participate in one checkpoint survey and a final summary report to inform the ISE department chair on their relationship status.

Section 2 | Mentoring Program Details

What is Mentoring?

Mentoring is a cooperative and nurturing relationship between a more experienced business person, the mentor, and a less experienced person, the ISE student, also known as a mentee. Students benefit from mentors who assist them in navigating the complexities of higher education, and the uncertainty and anticipation of what post-college life has in store.

The main purpose of the mentor relationship is to develop the student in his/her chosen major to successfully navigate the remainder of their college experience and help prepare them 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 quicken the path to career success as it provides a safe, protected environment in which the student can learn and grow professionally.

Steven Spielberg once said that "the delicate balance of mentoring someone is not creating them in your own image, but giving them the opportunity to create themselves."

The student benefits from the mentor's business experience and the valuable lessons learned over the years.

- The mentor can guide the mentee in developing skills, methods, and work habits. Such skills as writing an effective letter, maintaining useful documentation, navigating professional politics, teamwork issues, situational awareness, communicating ideas and managing complex projects may be addressed and encouraged in a non-threatening environment.
- When major decisions or choices arise, the mentor can be a useful source of advice and encouragement, sharing seasoned judgment on the various options available in a given situation. A mentor can evaluate the student's skills, attributes and natural talents and help guide them on their career path.
- Mentoring spans all professions and industries. Although the relationship focuses on helping the mentee succeed in his/her career through goal setting, business enrichment and network development, the ongoing, professional interaction often benefits both parties. It is essential for the mentor and the student to have a clear understanding of what each party feels will work best for one another.

It is crucial to observe, listen and ask questions to understand the goals of the mentoring relationship. The pair must maintain unconditional, positive regard for the mentor relationship at all times. Mentors and mentees should be supportive and non-judgmental of each other's views, lifestyle and aspirations. This support is paramount to the ultimate success of the relationship.

Aspects of the Mentor/Student Relationship

Level of Commitment

Frequency of contact is essential in the mentor/student relationship to keep the learning process moving forward. Each new discussion with the mentor should include updates from the mentee on items the mentor recommended in a previous conversation. Some may want to meet in person, while for others,

phone calls, emails or video chatting can serve the purpose. Whichever way the pair jointly decides to operate, both people should 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.
- Discuss creating action steps to accomplish the goals and tasks that will require additional attention.
- Your strengths, weaknesses, and skills can be part of the discussion while working together to help both sides of the relationship develop professionally.
- Make your goals "SMART" – Specific, Measurable, Actionable, Realistic and Timely.
- If assistance is needed, a template for development and tracking, a link is provided in the appendix.

Questions to ask before beginnings to set goals include:

- What exactly does the student want to change?
- How will the mentee's success be measured?
- When are the results expected?

The pair will need to focus on precisely what requires changing. This change could be anything from improving the student's resume writing skills, interviewing skills, listening skills to making better course selections, pros/cons of pursuing an advanced degree, expanding his/her network or leveraging an advisor better. The student's goals might change as the mentoring relationship progresses, so the mentor should build in flexibility.

It is vital to balance achievability against reality. Mentoring relationships need a high degree of informality to function well. The pair will need to build a depth of trust and overall rapport to explore issues profoundly and energetically.

Expectations: Students – Being an Effective Mentee

Mentees have as much responsibility for making the arrangement work as the mentor. So, students should ask themselves:

- 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 Wendy Blue, Academic Advisor, wcbblue@ncsu.edu)

The relationship is primarily about the student's progress. The following is a list of pointers for a successful mentoring relationship:

- Open communication is the foundation of a productive mentee-mentor relationship.
- Students should be enthusiastic and assertive in communicating their interests and needs.

- One of the most significant ways a mentor may be an asset is by sharing real-world work experiences. Mentees 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 schoolwork 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, they are not a parent or counselor.
- Most importantly, students must keep their commitments and remember that mentors have volunteered this time to be of service.

Making mentoring work is not just about finding a mentor with a particular position or status. There must be synergy and compatibility. Students should look for similarities with their mentors. Mentees should be able to make a list of 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 most comfortable 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?

Students should also write down a skill or two that they would like to improve. Wanting to enhance skills is within a mentee's power — building on preexisting skills such as public speaking, research or leadership skills. Gaining new skillsets is also an excellent choice. How to improve is entirely up to each mentee.

Students who expect their mentors to commit to assisting them must commit to being active in the relationship. Mentees who are engaged in the relationship have mentors that follow suit. Mentors volunteer their time from an already busy schedule to help students achieve their goals. So, students should take it seriously and know the expectations:

- Be open to feedback
- Demonstrate a willingness to learn and grow
- Ask for advice, suggestions and opinions
- Listen, apply the information and commit to results
- Set a routine to meet with the mentor, but make every effort to honor the mentor's gift of time and experience by being flexible around their available meeting times. Mentees must try to avoid rescheduling this valuable time with them.
- Please notify the mentor in advance and try to reschedule any missed meetings as soon as possible.

Best Practices: Mentoring Manners

Mentors should come prepared for each meeting with an idea of what needs to get accomplished. They should begin each session by reviewing recent accomplishments, discussing any challenges, and

identifying the focus of today's meeting. Students should ask for what they need so that the mentor can focus on those issues. Students should fill out the [Personal Development Plan](#) before each session.

Students should:

- Do their homework. If they have agreed to take a specific action based on your mentor's recommendations, they need to follow through. It is frustrating for a mentor to talk without action.
- Defer to the mentor's busy schedule. Most mentors will try to coordinate schedules so that they are agreeable to both parties. However, when in doubt, accommodate the mentor's schedule as much as possible.
- Ask about email/phone interactions outside of mentoring meetings. If the mentor doesn't specifically address whether they are open to emails and phone calls between scheduled mentoring appointments, the student should ask what they can and cannot accommodate.
- Keep scheduled appointments. Meeting with the mentor should occur approximately once a month. Unless there is an emergency, students should avoid rescheduling appointments.
- Not expect the mentor to hire them or find them an internship or job elsewhere. Mentoring can lead to great contacts, but a job should not be the expectation. Students who spend sufficient time with their mentors can request a letter of recommendation.
- Maintain confidentiality. What the pair work on and talk about is confidential. Growth and progress happen best when both parties feel free to speak openly, make mistakes and experiment. Even after a year together, students should respect this.
- Keep a journal. It's a good idea to keep a journal of mentoring meetings. It helps keep students focused on their goals, remember what they discussed and worked on, see how far they have come in a year and prepare for monthly meetings.

Winding Down

It might appear strange to be discussing the "winding down" of a mentoring relationship. Does it end when mentees reach their goals? Handling this stage of the relationship requires as much if not more care than any other stage of the mentoring process.

The mentor and student should:

- Set goals at the start. If and when they achieve those outcomes, the pair has a measure for the mentoring relationship's success.
- Realize that the mentor's time is valuable. The mentee should expect that the relationship will scale down over time, gradually reducing contact. Students should be open to a limited relationship after the mentoring period is over, regardless of how it may appear.
- Have a conversation before the last meeting about plans for ongoing development and setting goals. Mentees should offer to check in with the mentor from time to time on progress. The mentor should clarify that this is the last meeting to provide closure and ensure that neither party is confused about the future.

In preparation for wrapping up the mentoring relationship, the mentor and student should:

- 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 each other's feelings
- Talk about how the student will continue learning and career planning without this mentoring relationship
- Talk about the student becoming a mentor, leveraging what he/she has learned in the process. It is good for mentees to give back part of what they have received.
- Celebrate the successes of the relationship.
- Agree on how and when they may want to keep in touch. **Many mentors and mentees continue on an informal basis and build friendships that can last a lifetime!**

Expectations: Mentors

The five main tasks of a mentor are to:

1. Establish a personal relationship
2. Help the student to develop career interest areas and skills
3. Assist the student in obtaining resources
4. Increase the student's abilities to interact with other social and cultural groups
5. Encourage development in new field-related competencies

Most importantly, the mentor must foster an environment of open communication. Regular face-to-face or video-chat contact is best for developing the kind of relationship favorable to such conversation. However, frequent contact by telephone or email will help to forge the necessary personal connections if that is not always possible.

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 understand the mentee's learning style and adjust accordingly.

Mentors should read the "[Expectations: Students – Being an Effective Mentee](#)" to see how the students enter into this relationship. Remember that this may be their first formal mentoring relationship, and often, they are unsure how to act. Mentors should follow these tips to get the mentoring relationship off to a good start:

- The student is to initiate contact with the mentor within two weeks of receiving the matching email and should schedule the first discussion within two weeks. Mentors should introduce themselves and be sure to:
 - Establish a communication place, format, time and schedule.
 - Confirm phone and email addresses
 - Set boundaries, if needed, regarding times they are not available for phone calls
- At the first meeting/discussion, mentors should :
 - Ask the students to tell a little about themselves like, where they are from, what year are they in school, what made them choose NC State or what made them pick industrial engineering
 - Tell the student similar things about their work. This discussion may include a brief career description and the companies for which they have worked

- Ask the student if they thought about specific goals for the relationship
 - If they respond, "yes," discuss them.
 - If they respond, "no," give them the assignment to present 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. Make them aware of the ISE Department Alumni Engagement sessions for resume reviews, interview prep, NC State Career Development Center tools, etc.
 - Questions to ask when setting goals include:
 - What exactly does the mentee want to change?
 - How will success be measured?
 - Does the mentee 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 mentee's level of commitment to the goals?
 - Do they have a method to develop their goals and track progress? If not, suggest the [Personal Development Plan](#).
 - Mentors should focus on precisely what they are trying to change or achieve when setting practical objectives. These goals might change as the mentoring relationship progresses, so flexibility should be part of the plan.
 - It is essential to balance achievability against reality. The needs of the mentee can dictate the level of formality. 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 student opportunities to explore issues profoundly and energetically.

Networking

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

About being a Mentor

Being a mentor is a valuable experience. Mentors will be able to share their industry knowledge and life experiences to truly help people grow and progress through their college education and potentially their careers. Steven Spielberg once said, "The delicate balance of mentoring someone is not creating them in your own image, but giving them the opportunity to create themselves."

Mentors will have a fantastic feeling of contributing first hand to helping someone develop professionally and gaining skills themselves. Especially for young mentors, a relationship with a mentee will allow them to practice their managerial skills and build professional networks in the business community. Mentoring will enable mentors to practice in various business activities, from goal setting to crisis management.

Mentors give back to the community and truly touch someone in an essential aspect of his/her life and their career. Guidance will be influential in helping that person succeed and grow while establishing a relationship of mutual respect and trust that encourages the mentee to grow. Mentors offer encouragement to achieve goals and possibly reveal areas for further development.

Although mentors may need to probe and help students define objectives, the students must be the drivers of desired outcomes. The best relationships usually involve a proactive mentee and a passive yet reactive mentor. As a mentor wanting to provide the student with an appropriate sense of direction, consider asking the following questions to the mentee:

- 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?

Four practical steps the mentor should take to manage the relationship include:

1. Manage the plan. Take primary responsibility to decide the content, timing and direction of the discussion. Point the mentee towards specific goals and give reliable advice or suggestions. Push the mentee to think about what they want to discuss before each meeting.
2. Meet routinely. It does not have to be a rigid when and where the mentoring occurs, but it's essential to set time aside to establish a routine.
3. Encourage mutual appreciation. Let the mentee know you're getting as much from the session as he/she is; it will maintain and encourage further open-ended discussion.
4. Encourage the student to use available campus resources when questions or issues arise.
 - A. Remind each student to consult with a faculty adviser for all academic-related matters.
 - B. Mentors should contact Wendy Blue, Academic Advisor, wcblue@ncsu.edu right away if any immediate concerns about the health and safety of a particular student.
 - C. NC State's Department of Academic and Student Affairs offers a guide to anyone who interacts with the student body in identifying students in distress: [**Recognizing Students in Distress**](#)

Appendix

Alumni Student Mentoring Program Timeline

The following is a list of the key activities and milestones for students and mentors in the ISE ASMP.

Action	Responsibility	Timing
Solicitation of mentors	ISE Department	July
Alumni mentor registration and submission of bios	NC State ISE Alumni	July/August
Student introduction to mentoring program	ISE Department of Undergraduate Advising	August (Start of Semester)
Student registration	Student	Late August
Students matched with mentors	ASMP Committee	Early September
Mentoring begins	Student Initiates first discussion	Mid-Late September
First check-In survey sent to mentors/students	ISE Department mentors and students respond	November
Mentoring continues	Mentor and student	Through April
Annual mentor-student summary report	Mentors and students respond	April
Annual summary and evaluation of program	Department Head and ISE Advisory 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

[Student Guidelines](#)

Guidelines for Mentors

Describes the role of a mentor and summarizes best practices employed in developing an effective student-mentor relationship.

[Mentor Guidelines](#)

Alumni-Student Mentoring Program Personal Development Plan

An (optional) form that can be used by students and mentors to identify specific goals of the mentoring relationship, and detail an action plan to achieve those goals.

Personal Development Plan

This handbook is an adaptation of the PSIEMS Industrial Engineering Mentoring Program Handbook developed by The Harold and Inge Marcus Department of Industrial and Manufacturing Engineering at Penn State University.