# Introduction to Assignment & Rubric:

The Personal Development Plan (PDP) assignment will prompt you to consider what you have learned in class and make a plan to help you succeed in graduate school. This assignment relates to two of our course learning objectives:

* Recognize and understand essential relationships found in graduate education
* Reflect on one’s role in the Virginia Tech community and engineering profession

This assignment will be assessed according to the following rubric. To receive full credit for this assignment, you must score "Proficient" or above in all three categories. A score of "Working Toward Proficiency" in any category will require a resubmission based on feedback from the grader.

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Working Toward Proficiency** | **Proficient** | **Beyond Expectation** |
| **Organization** | Information is not organized and/or not written in paragraph format.  One or more components are missing.  Minimum word count not met or maximum word exceeded count by an excessive amount. | Information is well organized in paragraph format.  All components are completed and submitted.  Word count fits within specified range. | Information is very well organized with well-constructed paragraphs; use of subheadings.  All components are completed and submitted.  Word count is within specified range. If maximum word count is exceeded for a prompt, there are no more than 100 extra words. |
| **Quality of Response** | Information is not on topic.  All questions and sub-questions were not answered thoughtfully. | Information clearly relates to the topic.  All questions and sub-questions are answered thoughtfully.  Responses include some general ideas/issues from class discussion and/or from outside experiences related to the topic. | Information clearly relates to the topic.  All questions and sub-questions are answered thoughtfully.  Responses demonstrate in-depth synthesis of experiences related to topic and/or connections to experiences outside of class. |
| **Sources** | Sources are quoted or referenced, but they are not cited. | References or quotes are attributed to the original source through a citation. | Citations and references are organized and cited according to APA, IEEE, or other disciplinary standards. |
| **Note**: If you refer to a source (e.g., article, website, etc.), it **must** be cited. Failure to cite your sources appropriately is a violation of the VT Graduate Honor Code. | | | |

*A note on specified word limits/counts:* The PDP is designed to be a useful tool for you. Word limits/counts are approximate and represent our estimate of how much you need to write in order to complete each prompt in a thoughtful manner. If you are unable to meet a prompt’s minimum word limit, document why that is and describe how you can/will work to fill in those blanks as you progress through your program. If you exceed a prompt’s maximum word count, that’s perfectly fine; please just do not go more than 100 words over the prompt’s specified maximum word count.

**Review the prompts below and type your responses in the yellow boxes/spaces provided.**

**A complete assignment will include 3 or 4 files that you need to upload to Canvas:**

* *This document with your responses typed in the appropriate boxes,*
* *Your completed Mentor Map Worksheet,*
* *Your Timeline or Plan of Study (****ONLY if you complete Option 2A****), and*
* *Your completed Mentor/Mentee Expectations Worksheet*.

Any file format (e.g., .docx, .xlsx, or .pdf) is ok. The submission portal on Canvas allows you to upload multiple files, **please do not upload zip files**.

--------------------------------------------------------

# Assignment Prompts:

## Career Goals (Relates to topics covered throughout the course)

* 1. For context, please provide the following information.

| **Degree Program:** What are you studying? What degree (MS or PhD) are you pursuing? |
| --- |
| Aerospace Engineering, MS |

| **Year:** How long have you been in your program? |
| --- |
| 2 years |

| **Estimated, Expected Graduation Date:** When do you plan to graduate? |
| --- |
| Summer 2025 |

* 1. What are your long-term (5-10 years) career goals? If you are unsure, please discuss the options you are currently considering.

|  |
| --- |
| **Please respond to 1.2 in the box below. Your response should be in paragraph format and be approximately 100-200 words.** |
| My immediate goals are to develop my technical skills as an engineer to a level where I can complete tasks independently and efficiently. I am still learning the tools and fundamentals of my field in a relevant environment and often require guidance from senior team members to complete tasks accurately. My goal is to get more experience under my belt such that I can be the one helping others and ultimately grow into a position of leadership. I think I am good at explaining complex ideas when I myself finally grasp them, and so I could become a good mentor if I get experience in applying engineering principles. |

* 1. In light of your long-term goals, what competencies should you focus on developing as a graduate student? Tips for completing 1.2:
     + You can consider the [*Researcher Development Framework*](https://www.vitae.ac.uk/vitae-publications/rdf-related/researcher-development-framework-rdf-vitae.pdf), which lists a variety of skills needed by researchers and professional engineers.
     + It may also be helpful to discuss this question with more advanced graduate students or faculty in your discipline.

|  |
| --- |
| **Please respond to 1.3 in the box below. Your response should be in paragraph format and be approximately 100-200 words.** |
| In the immediate future, I should focus on developing my knowledge and intellectual abilities. Graduate school offers a structured approach to developing technical excellence in professionals. Access to experienced and knowledgeable faculty has been invaluable for me in tackling my research areas of interest (Aerospace guidance, navigation, and control). This field, and many like it, is generally niche and lacks written materials which provide enough insight to develop competency in the area. It is more practical to learn under practicing experts and engage with them about the topic.  Another area is Research governance and organization which refers to the planning and execution of research projects. This is a core leadership skill in research and industry and those who recognize this are broadly successful. |

* 1. Considering your answers to the above question, what additional experiences (beyond coursework) will you engage in to further your development?

|  |
| --- |
| **Please respond to 1.4 in the box below. Your response should be in paragraph format and be approximately 100-200 words.** |
| I believe it is important to form relationships with peers in any activity be it professional or otherwise. People are the foundation of all pursuits and relationships are the glue that keeps everything together. I am a fully remote student which presents unique challenges to this subject, but thankfully there are ways of mitigating them. I have made efforts to contact fellow students in each of my classes and meet with them virtually for studying/peer review purposes, which has worked well so far. It is much easier to work through problems when you can bounce ideas off another individual. When you build a support system problems become more workable. We are fortunate to live in a time where communication is so accessible and pervasive made possible by the internet. |

## Looking Ahead (Relates to topics covered throughout the course)

Depending on where you are in your program, select one of the following two options for this section. ***You only need to complete one, either Option A or B.***

### Option A: If you are a new/junior graduate student, complete 2.1 & 2.2

* 1. Create a timeline for your time in graduate school. At a minimum, your timeline should include the following:
     + Coursework
     + Milestones (e.g., qualifier, preliminary exam, proposal, defense)
     + Other professional activities (publications, attending conferences, teaching experience, etc.)

Also, include any other activities you feel will be important for your professional development. Refer to your department’s student handbook to understand the specific requirements for your degree program.

|  |
| --- |
| **Upload your timeline as a separate document.**   * Note: The provided Engineering Education Timeline Template (see Canvas Files) is meant as an example/guide; if you have another format from your department or if you’d prefer to submit a Plan of Study, feel free to use that. |

* 1. What other commitments or obligations (family, community, teaching, religious, etc.) will you have, or anticipate having, during graduate school or your professional career? Make a list of at least three (3) other commitments and describe strategies for balancing these responsibilities.

|  |
| --- |
| **Please respond to 2.2 in the box below. Your response should be in paragraph format and be approximately 150-250 words.** |
| N/A |

### Option B: If you are a senior student nearing graduation, complete 2.3 & 2.4:

* 1. How will you take what you learned in this class into your next stage of life?

|  |
| --- |
| **Please respond to 2.3 in the box below. Your response should be in paragraph format and be approximately 150-250 words.** |
| I intend on applying the interpersonal skills learned in this class to my academic and professional career. The core message is that people have different backgrounds which influence their ways of thinking. It is important to consider these varying ways of thinking when interacting with other individuals so as to avoid conflict, disunity, antagonism, etc. I plan to take more time thinking about how others would see things and how that may vary from my own in the context of performing tasks. My personal goals are to develop my technical skills and expertise to become a leader and mentor in my profession. I have made strides to do this by furthering my education at the master’s level and gaining experience on the job. With the lessons learned in this class, I hope to be better at collaborating with my peers and learning under my mentors. Managing expectations at the outset of a mentorship relationship is a tool I plan to apply to my future mentor/mentee pursuits. I intend on being more aware of my colleagues’ perspectives on the work at hand and incorporating them into my analysis and communication on the problem statement. I now much better recognize the challenges associated with this diversity of cognition. |

* 1. What commitments or obligations (family, community, teaching, religious, etc.) will you have, or anticipate having, during your professional career? Make a list of at least three (3) commitments and describe strategies for balancing these responsibilities.

|  |
| --- |
| **Please respond to 2.4 in the box below. Your response should be in paragraph format and be approximately 150-250 words.** |
| 1. I have a commitment to my family to help my parents as they grow older and deal with the challenges associated with that phase of life. Life changes for everyone with age and tasks can become more difficult both physically and mentally. I feel an obligation to alleviate these hardships because I care about my parents, and I feel they earned a comfortable retirement for raising me as they did. I intend to set myself up financially well enough to support them as needed and allow myself the time to visit and help them in their retirement lives. 2. I have a commitment to my brother and his future family which I expect to grow over the years. I know his financial situation is less consistent than my own, which I would like to help with if I am able to. This means progressing in my career and developing stability. 3. I have a commitment to my duty as a practicing engineer to produce analyses ethically and efficiently. It is important to maintain integrity in one’s work; shotty engineering can easily throw away millions of dollars or risk life and limb. I am obliged to perform to the best of my ability and to admit shortcomings and the resulting uncertainties. The pressure of completed work should never sacrifice the quality of the analysis. |

## 

## Support and Wellness (Covered in Parts 2, 9, & 10)

* 1. Complete the [*M*](https://docs.google.com/document/d/1XONA0cfjfapSEq9WvDUQ0Y9iRszUuJfL/edit)*entor**Map Workshee*[*t*](https://docs.google.com/document/d/1XONA0cfjfapSEq9WvDUQ0Y9iRszUuJfL/edit) (see Canvas Files) to the best of your ability by identifying who will provide you support in different areas.

|  |
| --- |
| **Upload your Mentor Map Worksheet as a separate document.** |

* 1. Are there any lines and/or sections of the mentor map that are empty? If so, please discuss how you might identify people to fill in these areas.If not, write ‘no’ and continue to the next question.

|  |
| --- |
| **Please respond to 3.2 in the box below. Your response should be in paragraph format and be approximately 100-200 words, *unless your answer is no.*** |
| The mentor map clearly shows that my internal mentors and professional development support is lacking. I have not considered this until mapping everything out, but it makes sense as I am a fully remote student which makes creating professional relationships on campus difficult. It is hard to meet individuals in graduate school outside of classes as my program is less research based and mainly focused on coursework. During my undergrad studies, I got involved in extracurricular robotics work in which I made many professional connections; one actually connected me to my current employer. This is not really an option full remote, but I hope to make up for it by connecting with my teammates at work and looking for ways to connect beyond simply the tasking at hand. |

* 1. It is important to consider all aspects of your identity (and life) in creating your support network and seeking people who can support your personal well-being and professional development. Are there any aspects of your personal and/or professional life that are significant to you that are not represented on your map? If yes, how can you go about finding support in those areas? If not, write ‘no’ and continue to the next question.

|  |
| --- |
| **Please respond to 3.3 in the box below. Your response should be in paragraph format and be approximately 100-200 words, *unless your answer is no*.** |
| I think the one area that could be represented more for me is that of the peer role. Not so much a mentor, but those in my profession that are in the same situation and similar background as I have which I feel help me stay motivated and sure of my path. I often suffer from imposter syndrome and feelings of incompetence, and it is very helpful to talk with my peers at work and in class who are going through the same things. This if uplifting and helps my motivation to keep working towards my goals. |

* 1. As it relates to wellness, what lessons from class can you implement into your life to support your physical and mental health?

|  |
| --- |
| **Please respond to 3.4 in the box below. Your response should be in paragraph format and be approximately 100-200 words.** |
| I think I have realized the importance of being honest with oneself when dealing with the challenges of one’s academic and professional careers. Stress can creep up undetected due to adversities that are inevitable in engineering work. Deadlines, expectations, conflict, can all take a toll on one’s mental health and it is important to recognize this early and take a step back and consider alternative course of actions, even if it means conceding some expected goal. Communicating with peers and mentors can lead to unexpected solutions or at least recognition of the challenges. The relationship of a career and mental state must be considered wholistically in order to fully understand the issues and make appropriate corrections. |

## 

## Aligning Expectations (Covered in Part 1)

* 1. Select someone from your Mentor Map with whom you might need to align expectations; you can choose a professional mentor (e.g., advisor, peer mentor, postdoc, etc.) or a personal mentor (e.g., family member, spiritual advisor, coach, etc.)
     + Schedule a meeting to discuss your expectations with your chosen mentor
     + Prior to the meeting, prepare for the discussion by completing the *Mentor/Mentee Expectations Worksheet* (see Canvas Files). *Bring this document with you to your mentor meeting.*
     + Note: Consider referring to additional resources, such as the *Mentee Guide to Planning for First Meetings* (see Canvas Files), when planning this meeting.

|  |
| --- |
| **Upload your Mentor/Mentee Expectations Worksheet as a separate document.** |

* 1. After you meet with your mentor, reflect on the conversation you had with them and respond to the following questions:
     + How did you feel the conversation went? Please explain.
     + Were you and your mentor aligned on your expectations? Please explain.
     + Based on your conversation with your mentor, what updates would you make to your Worksheet (if any)? Please explain.
     + In your response, please specify which support area(s) of the Mentor Map this mentor occupies (e.g., Substantive Feedback, Sponsorship, Emotional Support, Professional Development, etc.)

|  |
| --- |
| **Please respond to 4.2 in the box below. Your response should be in paragraph format and be approximately 200-300 words.** |
|  |