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Reflection on My Computer Engineering as a Discipline Course

Taking this course has truly deepened my understanding of what it means to be an engineer. Before entering the program, I only had a general idea of what computer engineering was about. However, as the weeks went by, this course opened my eyes to the broad scope of engineering and the essential role that computer engineers play in shaping the modern world. It has given me not just knowledge, but also the mindset and discipline that every aspiring engineer must develop.

One of the most valuable things I learned from this course is the importance of the engineering design process. I discovered that engineering is not simply about building machines or writing code, it is a systematic approach to solving problems. From identifying a problem to brainstorming solutions, designing prototypes, testing, and improving them, I realized that every stage of the design process requires both creativity and analytical thinking. The process also demands collaboration, patience, and persistence, especially when initial designs fail to meet expectations. Understanding this cycle helped me appreciate that innovation does not happen overnight; it's the result of careful planning, testing, and continuous improvement.

Through this course, I was also introduced to the different fields and professions in engineering, such as civil, electrical, mechanical, and computer engineering. This exposure helped me see how interconnected these disciplines are, and how teamwork among different engineers is crucial to the success of real-world projects. It made me more confident about pursuing computer engineering because I now understand how it contributes to society, particularly in creating systems that improve communication, efficiency, and technology.

One memorable activity that reinforced these lessons was when our group built a rubber-powered car vehicle. At first, it seemed like a simple hands-on project, but it turned out to be an eye-opening experience about teamwork, communication, and problem-solving. Our group encountered several difficulties, from design flaws to performance issues, but we managed to overcome them by working together and listening to one another's ideas. That experience taught me that in engineering, teamwork is not optional, it's essential. No matter how skilled an individual is, collaboration will always lead to better results. Truly, no man is an island, especially in the field of engineering.

Another crucial aspect of this course was its emphasis on engineering ethics. I learned that being an engineer is not only about having technical knowledge and skills but also about upholding integrity, responsibility, and discipline. Ethics guide engineers to make decisions that prioritize safety, sustainability, and fairness. Without ethics, even the most brilliant innovations could cause harm. This made me realize that moral values are just as important as technical competence in shaping a responsible engineer.

Communication was also a significant theme throughout the course. I came to understand that oral, written, and graphical communication are vital tools in engineering. Engineers must be able to present ideas clearly, write effective reports, and visualize concepts through drawings or models. Mastering these communication skills allows us to express our ideas effectively and work efficiently with others. It also ensures that our designs can be understood, implemented, and improved upon by future engineers.

Lastly, I would like to express my heartfelt gratitude to Ma'am Menchie Rosales, our instructor, for her patience, dedication, and passion in teaching us. Her guidance made complex concepts easier to understand and inspired me to take learning seriously. She encouraged us to think critically, work diligently, and always uphold ethical values as future engineers. Without her support and encouragement, I would not have developed the same level of appreciation and enthusiasm for this course.

Overall, this course has been transformative. It strengthened my problem-solving abilities, helped me see logical connections between problems and their solutions, and inspired me to continuously seek improvement. It made me realize that being an engineer means more than just understanding machines or computers, it's about being a thinker, a creator, and a problem-solver guided by ethics and purpose. I

know that someday, I will look back at this experience with gratitude, remembering how this course laid the foundation for the engineer I aspire to become.