Paper must be between 1600-2000 words. One percent deducted for every 10 words under or over the word count range. Counting the number of words in an APA Style paper is easy: Count all the words in the entire paper to get the total word count. That includes the title page, abstract, main text, quotations, headings, citations, footnotes, reference list, tables, figure captions, and appendices - everything. This gives an accurate representation of the overall length of your paper and saves you from having to perform elaborate calculations just to know whether your paper is too long, too short, or just right. Use the word count feature of your word-processing program to count the words in your paper and place this number on the bottom of the title page. This paper on sustainable development discusses the process of moving engineering activities to a pattern that can be sustained in perpetuity. It is an approach to environmental and development issues that seeks to reconcile human needs with the capacity of the planet to cope with the consequences of engineering innovation. Many practices and lifestyles of modern society, particularly but not exclusively industrialized societies, simply cannot be sustained indefinitely. We are exceeding the capacity of the planet to provide many of the resources we use, while many of the planet’s inhabitants cannot meet their most basic needs: air, food, water, and shelter. We are like every other species on earth: our principal concern is to feed and shelter ourselves. Agriculture was our first great revolution, and the first surplus and gave birth to cities and civilizations. Food, water, and shelter are a prerequisite for survival. This paper describes how humans, and engineers more specifically, disrupted the balance that is so essential in life and examines how we are depleting what nature provides. The paper will focus on four essentials to human life: air, food, water, and shelter. In the first part of the paper, you will outline engineering innovations that have negatively impacted each of these four basic human needs. This will include at least one engineering innovation that has negatively affected each. For example, you might speak to how carbon emissions or deforestation have destroyed air quality or how industrial waste has ruined water supplies. In this context you will explain how each of these problems impact the respective resources that are essential to human survival and detail what the potential outcomes are if not addressed. You will likewise identify which branch of engineering is involved in each issue you address. Points you may address can include the following: Agriculture: How do traditional models of farming deplete the resources in the land? Energy: How does burning coal or oil impact the environment? Private transportation: How does an overreliance on private transportation exacerbate the issues associated with fossil fuels? Manufacturing: How do manufacturing process deplete non-renewable resources? Housing: How do urban sprawl and housing estates limit growth? In the second part to the paper, you will propose potential engineering solutions that have the potential to address the sustainability issues outlined in the first part. For example, you might point to how solar power could replace gas, or strategies that can be used to address food shortages. In this context, you will outline which branch or branches of engineering would be involved in the solution, describe how these solutions will address the problem, and explain what will make them sustainable. Points you may address can include the following: Agriculture: What strategies can improve upon traditional models? Crop rotation? Mixed farming? Multiple cropping? Energy: Which renewable resources have the lowest negative impact on the environment? Solar power? Wind? Hydro? Public transportation: How can public transportation reduce emissions? High speed rails? Electric buses? Cycling? Manufacturing/consumption: What manufacturing models reduce the depletion of natural resources? Reclaiming old cell phones? Peer-to-peer sharing? Distributed manufacturing? Housing: How we reduce the impacting housing has on the environment? Sustainable architecture? New urbanism? Suggested search engine: Google Scholar Your conclusion will summarize your central points in the order you presented them and conclude with a final thought to encourage the reader understand the importance of following through with and supporting sustainable initiatives