A major milestone in every young person’s life is choosing how to spend the rest of his or her professional life. Based on personal experience, here are five reasons I think high school students should apply to engineering programs.

1. **Large selection of engineering paths gives career flexibility.**
   Entering an engineering program opens the door to multiple branches of engineering. Many schools require the student to complete a general first-year curriculum (math, science, English, and computer skills) before moving forward in an engineering specialty. This allows the student to explore and firm up his or her engineering interest.

2. **Engineering occupations are high-paying.**
   In a recent U.S. Bureau of Labor Statistics (BLS) The Editor’s Desk (TED) report, STEM (science, technology, engineering, and mathematics) occupations were classified as high-paying. The mean annual wage for all STEM occupations was $77,880; only 4 of the 97 STEM occupations were below the U.S. average of $43,460. The highest paying STEM occupations of $100,000 include managerial, petroleum engineers, and physicists. The BLS reports that civil engineers made $77,506/year (2010) or $37.29/hour, mechanical engineers made $77,560/year (2012) or $38.74/hour, and electrical engineers made $87,920/year (2012) or $42.27/hour. The bachelor of science degree is the entry-level education requirement.

3. **Engineers’ job outlook is positive.**
   The BLS’s June 15, 2011, TED report indicated that technical jobs in STEM represented approximately 6% of U.S. employment (nearly 8 million jobs). The largest STEM occupations were computer support specialists, computer systems analysts, and computer software engineers; each had employment of approximately 500,000.
   The BLS Occupational Outlook Handbook projects positive job growth from 2010 to 2020. Employment for civil engineers is expected to grow 19% from 262,800 to 313,900; mechanical engineers is expected to grow 9% from 243,000 to 264,500; and electrical engineers is expected to grow 6% from 294,000 to 311,600.

4. **Engineers’ work is fun.**
   Civil engineers plan, design, construct, and manage physical infrastructure such as buildings, bridges, tunnels, transportation systems, wastewater treatment systems, coastal and ocean facilities, and public works. Mechanical engineers apply principles of mechanics, dynamics, and energy transfer to the design and analysis of complex buildings and to the testing and manufacture of machines, engines, power generating equipment, vehicles, artificial components for the human body, and other products. Electrical engineers apply engineering concepts to power generation, transmission, and distribution of power.

5. **Engineering work is challenging.**
   Engineers work in a professional environment where there is an opportunity to learn and grow through on-the-job and formal training using the most up-to-date technologies. There will never be a shortage of new challenges, as engineers are constantly faced with having to adapt solutions and change technology to move with the trends and needs.
   Based on the above reasons, if any young person has strong STEM aptitudes, has completed the STEM coursework, and has a desire to work in problem solving and help the world, entering the engineering program is the right choice as a means to a better life economically, job satisfaction, and a good career.

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